WIND 125

TECHNICAL SPECIFICATIONS

ENGINE & TRANSMISSION

Type	Four stroke, Natural air cooled
No. of cylinders	One
Bore	54.00 mm
Stroke	54.40 mm
Engine displacement	124.60 cc.
Compression ratio	9.3 ± 0.5 : 1
Idling Speed	1400-1550 rpm (Warm condition with SAI)
Maximum net power	10.8 BHP (7.95 kW) at 8500 rpm
Maximum net torque	9.8 Nm at 7000 rpm
Ignition system	Electronic ignition
Ignition Timing	10^0 ± 1^0 BTDC at 1500 rpm 37^0 ± 1^0 BTDC at 3250 rpm
Fuel	Unleaded Petrol
Carburettor	Ucal Mikuni BS26
Spark Plug	Champion PRZ 9HC / Mico UR 2A
Spark plug gap	0.6 to 0.7 mm
Lubrication	Wet sump, Forced
Starting	Kick start
Clutch	Wet, multidisc

ENGINE & TRANSMISSION

Transmission		5 speed constant mesh
Overall Gear Ratios		1st Gear 33.09 : 1 (36/11) 2nd Gear 20.22 : 1 (32/16) 3rd Gear 14.90 : 1 (28/19) 4th Gear 11.95 : 1 (26/22) 5th Gear 10.11 : 1 (24/24)
Final Drive Ratio		03.14 : 1 (44/14)
Primary Gear Ratio		03.21 : 1 (74/23)

CHASSIS AND BODY

Frame type		Tubular, Semi double cradle type
Suspension	**Front**	Ceriani type : Telescopic Stroke : 110 mm
	Rear	Trailing arm with coaxial adjustable shock absorbers and coil springs
Brakes Type	**Front**	Drum or Disc
	Rear	Mech. expanding shoe & drum
Brake Size	**Front**	130 mm (drum) / 215 mm (disc)
	Rear	130 mm (drum)
Tyre	**Front**	2.75 x 18, 4/6 PR Or 2.75 x 18, 42 P
	Rear	3.00 x 18, 4/6 PR
Tyre Pressure	**Front**	1.75 kg/cm² (25 psi)
	Rear	Solo : 2.00 kg/cm² (28 psi) With Pillion : 2.25 kg/cm² (32 psi)

TECHNICAL SPECIFICATIONS

CHASSIS AND BODY

Rims	**Front**	1.6 x 18
	Rear	1.85 x 18
Fuel Tank Capacity	**Full**	13 Litres
	Reserve	2.5 Litres
	Usable Reserve	2.0 Litres

CONTROLS

Steering		Handle bar
Accelerator		Twist grip on R.H.S. of handle bar
Gear		Left foot pedal operated
Clutch		Lever operated on L.H.S. of handle bar
Brakes	**Front**	Lever operated on R.H.S. of handle bar
	Rear	Right foot pedal operated

ELECTRICALS

System	12 Volts AC + DC
Head lamp	35/35 W-HS1
Pilot lamp	4 W
Tail/stop lamp	5 / 10 W
Turn signal lamp	10 W
Neutral indicator lamp	3.4 W
Turn pilot ind. lamp	3.4 W
Speedometer lamp	3.4 W
Horn	12 V DC
Battery	12 V - 2.5 Ah

DIMENSIONS

Length	2025 mm.
Width	740 mm.
Height	1115 mm.
Wheel base	1260 mm.
Min. Turning circle radius	2040 mm.
Min. Ground clearance	155 mm.

WEIGHTS

Vehicle kerb weight	121 kg.
Gross vehicle weight	251 kg.

PERFORMANCE

Maximum speed	105 km/h. with single rider (68 kg.)
Climbing ability	25% (14^0 max)

NOTES :

- Values given above are nominal and for guidance only. 15% variation is allowed to cater for production and measurement variation.
- All dimensions are under unladen condition.
- Definitions of terminologies wherever applicable are as per relevant IS / ISO standards.
- Specifications are subject to change without notice.

P.D.I. CHECKLIST

TO CHECK	CHECK FOR
ENGINE :	
Engine oil (SAE 20 W 40 Of API SG + JASO MA)	Oil level. Top up if required Oil leakage if any
Idling Speed	Check / adjust if required (1400 to 1550 rpm)
Kick operation	Smooth Operation
Fasteners (Check torque & correct if required)	Cylinder head bolts (2.0 to 2.4 kgm.) Engine mounting (4.0 to 5.0 kgm.) Oil drain plug (2.7 to 3.3 kgm.) Spark plug (1.2 to 1.4 kgm.)
FUEL SYSTEM :	
Fuel Tank / Pipes	Leakages / Fitment
Fuel Tap	Smooth operation
Carburettor	Leakages (External), pipe connections
FRAME :	
A) WHEELS	
Tyre Pressure	Front - 25 PSI Rear - 28 PSI (Solo), 32 PSI (Double)
Rim runout (with tyre)	Radial - (0.5 mm or less) Axial - (0.8 mm or less)

TO CHECK	CHECK FOR
FRAME :	
Spokes	Check & tighten if required
Drive chain 	Slackness (20-30 mm), Lubrication (SAE 90) Check chain lock position
B) CONTROLS	
Brakes	Front brake lever play (4-5 mm)-Drum Rear brake pedal free play (20-30 mm)
Clutch	Lever free play (2-3 mm) & Smooth operation
Throttle	Grip free play (2-3 mm) & Smooth operation
Choke	Working & Smooth operation
C) SUSPENSION	
Front fork	Oil leakage & Smooth working
Rear shock absorber	Proper notch (Preset 2nd) setting - Same on both. Smooth working
Steering	Smooth operation (Loose or tight)
D) LOCK OPERATION	Steering cum Ignition Fuel Tank, Side cover

P.D.I. CHECKLIST

TO CHECK	CHECK FOR
FRAME :	
E) FASTENERS	(Check torque & correct if required) Front axle nut (5.0 to 6.0 kgm.) Check split pin Rear axle nut (6.9 to 7.1 kgm.) Check split pin Fork lower clamping bolt (3.2 to 3.8 kgm.) Trailing arm nut (5.5 to 6.5 kgm.) Rear shock mounting nut (4.0 to 5.0 kgm.) Steering top bolt (2.0 to 3.0 kgm.) Holder handle upper bolts (4 Nos.) (2.0 to 2.6 kgm.) Holder handle nuts (2 Nos.) (3.5 kgm.) Front brake disc install bolt (2.2 to 2.6 kgm.) Caliper install bolt (2.2 to 2.8 kgm.)
ELECTRICAL	
A) BATTERY 	Electrolyte level / Specific gravity (1.240) Charging (12.5V). Check Fuse. Routing of Breather pipe Routing of Wires
B) ALL BULBS WORKING	Head light / Pilot light Tail / Stop light. Side indicator Speedometer & Indicator lamps

TO CHECK	CHECK FOR
ELECTRICAL	
C) HORN	Horn working
D) SWITCH OPERATION	LH & RH control switch, Ignition switch Brake switch (Front & Rear)
TEST DRIVE (4-5 km)	
A) STARTING	Cold start & Warm start
B) DRIVE ABILITY	Idling Speed (warm condition - SAI working) (1400-1550 rpm.) Throttle response Gear shifting / Clutch operation Brakes (Front & Rear) Speedometer, Odometer, Trip meter & Tachometer working
C) CO % CHECK	CO should be 0.5 to 1.0% in warm condition with SAI properly working. Check and adjust CO if required (Refer Page No.32).
D) CLEANING	Wash & Clean vehicle properly.

REMOVE PROTECTIVE FILM FROM "CLUTCH COVER DECAL" & "COVER MUFFLER REAR" BEFORE DELIVERY.

Any other defects
Look for any external damages in Transit : **Please check, record & rectify.**

PERIODIC MAINTENANCE AND LUBRICATION CHART

Sr. No.	Operation / Frequency		Which ever comes first ⬇	✹ RECOMMENDED ODOMETER READING kms				
				Initial			Subsequent	
				1000	3,000	6,000	Every 6,000	Every 12,000
1.	Servicing			●	●	●	●	
2.	Valve clearance	A				●	●	
3.	Engine oil (SAE 20W40 of API 'SG' + JASO 'MA' grade)	R		●	Top-up	●	Every 6,000 km ★★	
4.	Oil filter element	R		●		●	Every 6,000 km	
5.	Oil strainer	Cl				●	Every 6,000 km	
6.	Air cleaner element ★	Cl		●	●	●	Every 6,000 km ★	
7.	Air cleaner element	R					Every 12,000 km	
8.	Carburettor / Idle speed / Check CO%	Cl, A		●	●	●	Every 6,000 km	
9.	Fuel system leakages	C, R		●	●	●	●	
10.	Fuel pipes	R	4 Years					
11.	Spark plug / gap	Cl, A		●	●	●	●	
12.	Spark plug	R					Every 12,000 km	
13.	Battery electrolyte level	C, A	15 days	●	●	●	●	
14.	Inline fuel filter (Clean in reverse direction of flow)	C, Cl				●	●	
15.	Brake light switch	C, A		●	●	●	●	
16.	Clutch lever play / Throttle grip play	A		●	●	●	●	
17.	Front brake lever (drum) and rear brake pedal play	A		●	●	●	●	
18.	Brake lining or pad wear (as applicable)	C, R				●	●	
19.	Steering play	C, A		●	●	●	●	
20.	All fasteners tightness	T		●	●	●	●	

● : Indicates operation to be performed.

★ : More frequent cleaning may be required when driving in dusty condition.

✹ : For higher odometer readings, repeat at frequency interval established here.

★★ : Replace Engine oil every 6000 km (After 1ST Service)
Use only "**Servo 4T" of *Indian Oil Corporation Ltd.*** or "**Castrol Active 4T" of *Castrol India Ltd.*** oil.

A - Adjust
Cl - Clean
C - Check
L - Lubricate
T - Tighten
R - Replace

PERIODIC MAINTENANCE AND LUBRICATION CHART

Sr. No.	Operation / Frequency		Which ever comes first ⬇	✹ RECOMMENDED ODOMETER READING kms				
				Initial			Subsequent	
				1000	3,000	6,000	Every 6,000	Every 12,000
21.	Tyre tread wear	C, R				●	●	
22.	General lubrication	L		●	●	●	●	
23.	Speedometer gear housing	L	2 Years					●
24.	Steering stem bearing	L	2 Years					●
25.	Wheel bearing	L	1 Year					●
26.	Swing arm pivot pin	L						●
27.	Drive chain	L					Every 500 km	
28.	Drive chain slack	A					Every 1000 km	
29.	Drive chain wear / Remove and Lubricate	Cl, L				●	●	
30.	Front fork oil	R						●
31.	Spoke tightness & rim runout	C, A		●	●	●	●	
32.	Brake front cable / Drum brake	R	2 Years					
33.	Rear shock absorber	C, A		●	●	●	●	
34.	Brake fluid level / top up ■	C	Month	●	●	●	●	
35.	Master cylinder cup & dust seal ■	R	4 Years					
36.	Caliper piston seal & dust seal ■	R	4 Years					
37.	Front brake hose ■	R	2 Years					

■ **Applicable for vehicle with Disc Brake**

● : Indicates operation to be performed.

★ : More frequent cleaning may be required when driving in dusty condition.

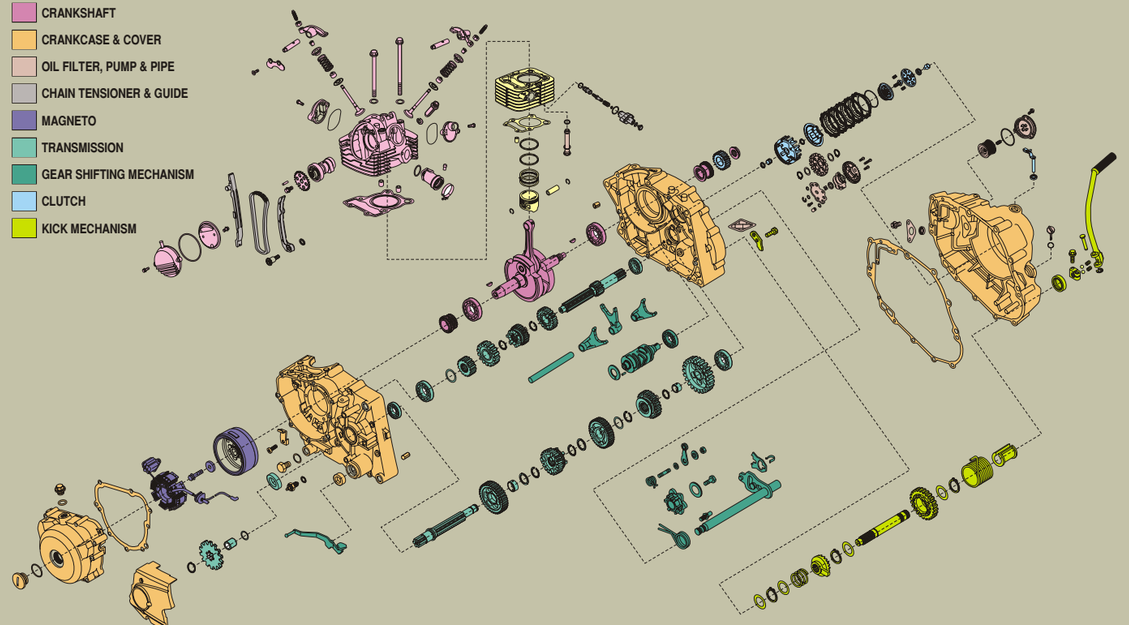
✹ : For higher odometer readings, repeat at frequency interval established here.

★★ : Replace Engine oil every 6000 km (After 1ST Service)
Use only "**Servo 4T" of *Indian Oil Corporation Ltd.*** or "**Castrol Active 4T" of *Castrol India Ltd.*** oil.

A - Adjust
Cl - Clean
C - Check
L - Lubricate
T - Tighten
R - Replace

ENGINE EXPLODED VIEW

- CYLINDER BLOCK / PISTON
- CYLINDER HEAD ASSEMBLY
- CRANKSHAFT
- CRANKCASE & COVER
- OIL FILTER, PUMP & PIPE
- CHAIN TENSIONER & GUIDE
- MAGNETO
- TRANSMISSION
- GEAR SHIFTING MECHANISM
- CLUTCH
- KICK MECHANISM



TIGHTENING TORQUES - ENGINE

BOLTS FOR CYLINDER HEAD

M8 - 2.0 to 2.4 kgm.

BOLTS FOR CYLINDER HEAD

M6 - 1.4 to 1.6 kgm.

BOLTS FOR 'SAI' PIPE

M6 - 0.8 to 1.1 kgm.

BOLTS FOR CAP ROCKER

M6 - 0.8 to 1.1 kgm.

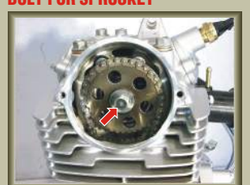
BSV VALVE

1.0 to 2.2 kgm.

NUT FOR VALVE CLEARANCE

M5 - 0.8 to 1.1 kgm.

BOLT FOR SPROCKET



M8 - 2.2 to 2.6 kgm

BOLTS FOR TENSIONER

M6 - 0.8 to 1.1 kgm.

BOLT FOR KICK LEVER

M8 - 2.2 to 2.8 kgm.

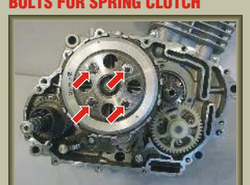
SCREW FOR GUIDE PLATE

M6 - 0.45 to 0.6 kgm.

BOLT FOR CLUTCH ASSEMBLY

M10 - 4.5 to 5.5 kgm.

BOLTS FOR SPRING CLUTCH



M6 - 0.8 to 1.1 kgm.

TIGHTENING TORQUES - ENGINE

BOLTS FOR OHC COVER

M6 - 0.8 to 1.1 kgm.

BOLTS FOR PLATE BREATHER

M6 - 1.1 to 1.3 kgm.

BOLT FOR GUIDE CHAIN

M6 - 1.1 to 1.3 kgm.

NUT FOR GEAR PRIMARY

M14 - 9.5 to 10.5 kgm.

BOLT FOR CAM CHANGE

M6 - 1.1 to 1.3 kgm.

NUT FOR LEVER DRUM POSITION

M6 - 0.9 to 1.2 kgm.

RETURN SPRING BOLT

M8 - 2.8 to 3.2 kgm.

BOLT FOR LEVER

M6 - 1.1 to 1.3 kgm.

BOLTS FOR CRANKCASE

M6 - 0.8 to 1.1 kgm.

BOLTS FOR CRANKCASE

M6 - 0.8 to 1.1 kgm.

SCREW FOR PLATE CAM CHAIN

M6 - 0.45 to 0.6 kgm.

DRAIN BOLT

M12 - 2.7 to 3.3 kgm.

TIGHTENING TORQUES - ENGINE

BOLTS FOR COVER GENERATOR

M6 - 0.8 to 1.1 kgm.

BOLTS FOR CLUTCH COVER

M6 - 0.8 to 1.1. kgm.

BOLTS FOR OIL SEAL

M6 - 0.8 to 1.1 kgm.

BOLTS FOR CHAIN COVER

M6 - 0.8 to 1.1. kgm.

SCREW FOR OIL PUMP

M6 - 0.45 to 0.6 kgm.

BOLTS FOR CAP OIL FILTER

M6 - 0.8 to 1.1 kgm.

BOLTS FOR STATOR - GENERATOR

M6 - 0.8 to 1.1. kgm.

BOLT FOR ROTOR - GENERATOR

M8 - 3.7 to 4.1 kgm.

SPARK PLUG

M10 - 1.2 to 1.4 kgm.

NEUTRAL SWITCH

M10 - 1.1 to 1.3 kgm.

TIGHTENING TORQUES - CHASSIS

STEERING NUT

0.4 to 0.6 kgm.

STEERING TOP BOLT

2.0 to 3.0 kgm.

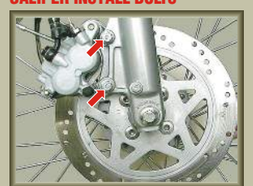
FRONT AXLE NUT

5.0 to 6.0 kgm.

REAR AXLE NUT

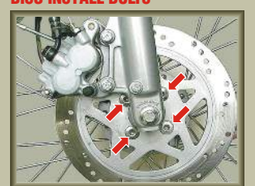
6.9 to 7.1 kgm.

CALIPER INSTALL BOLTS



2.2 to 2.8 kgm.

DISC INSTALL BOLTS



2.0 to 2.6 kgm.

SHOCK ABSORBER UPPER NUT

4.0 to 5.0 kgm.

SHOCK ABSORBER LOWER NUT

4.0 to 5.0 kgm.

SWINGARM PIVOT SHAFT NUT

5.5 to 6.5 kgm.

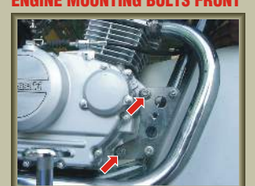
TORQUE ROD FRONT

2.2 to 2.8 kgm.

TORQUE ROD REAR

2.2 to 2.8 kgm.

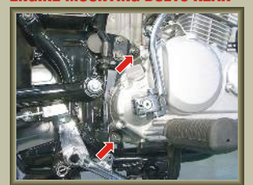
ENGINE MOUNTING BOLTS FRONT



4.0 to 5.0 kgm.

TIGHTENING TORQUES - CHASSIS

ENGINE MOUNTING BOLTS REAR



4.0 to 5.0 kgm.

ENGINE MTG. BOLT / NUT UPPER

2.2 to 2.8 kgm.

REAR SPROCKET INSTALL NUTS

1.7 to 2.3 kgm.

HANDLE BAR HOLDER FIX BOLT/NUT

2.0 to 2.6 kgm

INNER TUBE CAP BOLT

2.0 to 3.0 kgm.

REAR COUPLING SLEEVE FIX NUT

6.0 to 8.0 kgm.

INNER TUBE FIX BOLT- LOWER BKT

3.2 to 3.8 kgm.

STEP STAY INSTALL BOLTS

2.2 to 2.8 kgm.

OIL BOLT - DISC BRAKE

2.2 to 2.8 kgm.

OIL BOLT - MASTER CYLINDER

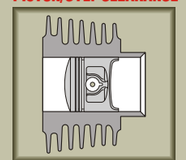
2.2 to 2.8 kgm.

BLEED OF VALVE - DISC BRAKE

0.7 to 0.9 kgm.

SERVICE DATA - ENGINE (All dimensions are in mm)

PISTON/CYL. CLEARANCE



Standard	0.018-0.042
Service Limit	---

ROCKER ARM SHAFT DIA.

Standard	11.98-11.99
Service Limit	11.96

VALVE SPRING FREE LENGTH

Standard	Exhaust	35.43	Inlet	35.43
Service Limit	Exhaust	35.30	Inlet	35.30

ROCKER ARM INSIDE DIAMETER

Standard	12.00 to 12.018
Service Limit	12.05

SHIFT FORK GUIDE PIN DIA.

Standard	5.9-6.0
Service Limit	5.8

CLUTCH SPRING FREE LTH.

Standard	41.50
Service Limit	39.70

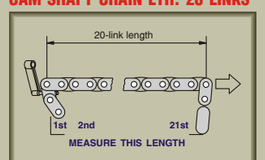
CYLINDER HEAD WARP

Service Limit	0.05

SHIFT DRUM GROOVE WIDTH

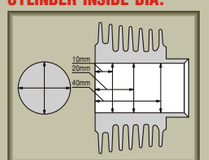
Standard	6.05-6.20
Service Limit	6.3

CAM SHAFT CHAIN LTH. 20 LINKS



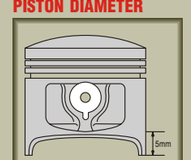
Standard	127.00 to 127.30
Service Limit	128.9

CYLINDER INSIDE DIA.



Standard	54.00-54.012
Service Limit	54.10

PISTON DIAMETER

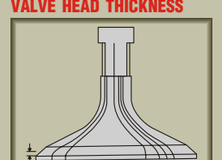


Standard	53.970-53.982
Service Limit	53.82

PISTON RING/GROOVE CLEARANCE

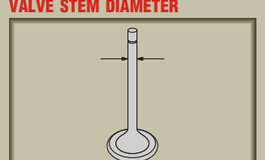
	TOP	SECOND
Std.	0.02-0.06	0.01-0.05
Ser. Limit	0.16	0.15

VALVE HEAD THICKNESS



	Exhaust	Inlet
Standard	1.15-1.45	0.85-1.15
Service Limit	0.5	0.5

VALVE STEM DIAMETER



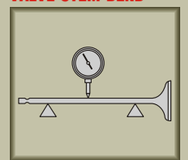
	Exhaust	Inlet
Standard	4.958-4.973	4.975-4.990
Service Limit	4.94	4.96

PISTON RING END GAP

	TOP	SECOND
Standard	0.15-0.30	0.30-0.45
Service Limit	0.6	0.7

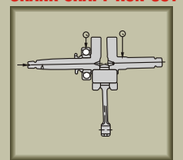
SERVICE DATA - ENGINE (All dimensions are in mm)

VALVE STEM BEND



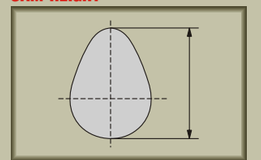
Standard	TIR 0.01
Service Limit	TIR 0.05

CRANK SHAFT RUN OUT



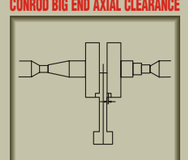
Standard	0.4 or less
Service Limit	TIR 0.1

CAM HEIGHT



Standard	Ex.	36.14-36.25	Inlet	36.39-36.51
Service Limit	Ex.	36.04	Inlet	36.29

CONROD BIG END AXIAL CLEARANCE



Standard	0.1-0.2
Service Limit	0.4

VALVE CLEARANCE

Standard	Ex.	0.08-0.12
	Inlet	0.05-0.08

COMPRESSION PRESSURE

Standard	12.0-14.0 kg/cm^2
Service Limit	9.1-14.0 kg/cm^2

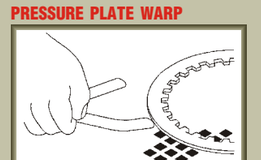
FRICTION PLATE THICK.

Standard	3.5-3.6
Service Limit	3.2

FRICTION PLATE THICK.

Standard	2.9-3.0
Service Limit	2.6

PRESSURE PLATE WARP



Standard	0.2
Service Limit	0.3

CARBURETTOR SPECIFICATIONS

Item	Wind 125
Make & type	UCAL Mikuni BS26
Idling speed	1400 to 1550 rpm
VC screw	2.5 ± 1 Turn
Jet needle clip position	2nd from Top
Main jet	#105
Pilot jet	#15
CO%	0.5-1.0 with SAI

ENGINE OIL SPECIFICATIONS

Grade
SAE20W40 OF API 'SG' + JASO MA

Quantity
1100 ml (Newly assembled engine)
950 ml (Drain & Refill)

Oil change frequency
Every 6,000 km
Check & Top-up if required.

Use only "**Servo 4T" of *Indian Oil Corporation Ltd.*** or "**Castrol Active 4T" of *Castrol India Ltd.*** oil.

SERVICE DATA - CHASSIS (All dimensions are in mm)

BR. CAMSHAFT HOLE DIA.

Standard	12.0-12.027
Service Limit	12.15

BRAKE CAMSHAFT DIA.

Standard	11.96-11.98
Service Limit	11.88

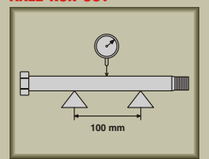
FR. BRAKE PAD THICKNESS

Standard	7.4
Service Limit	3.8

BRAKE SHOE LINING THICKNESS

Standard	4.3-4.7
Service Limit	2.3

AXLE RUN OUT

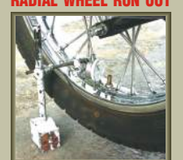


Standard	TIR 0.1 or less
Service Limit	TIR 0.2

AXIAL WHEEL RUN OUT

Standard	1.0 or less
Service Limit	2.0

RADIAL WHEEL RUN OUT



Standard	1.2 or less
Service Limit	2.0

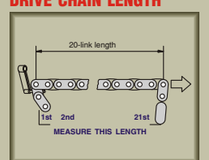
FRONT TYRE TREAD DEPTH

Standard	4.9
Service Limit	1.0

BRAKE DRUM INSIDE DIAMETER

Standard	130-130.16
Service Limit	130.75

DRIVE CHAIN LENGTH

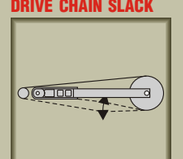


Standard	254-254.5
Service Limit	259

REAR TYRE TREAD DEPTH

Standard	6.8
Service Limit	2.0

DRIVE CHAIN SLACK

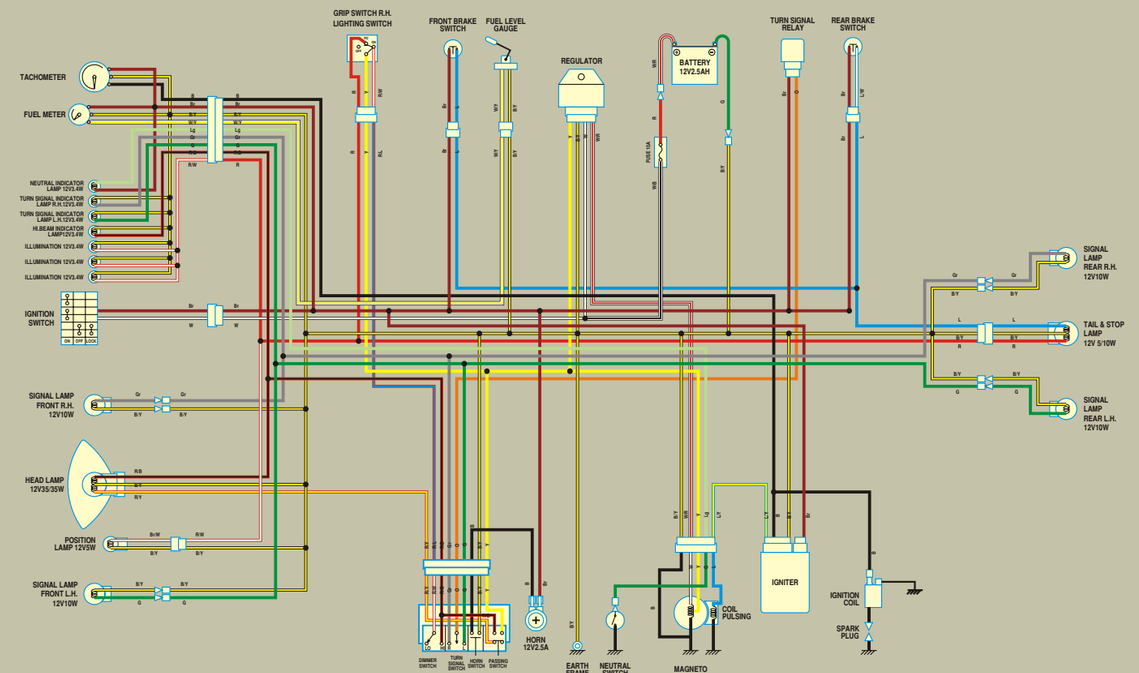


Standard	20 to 30
Service Limit	---

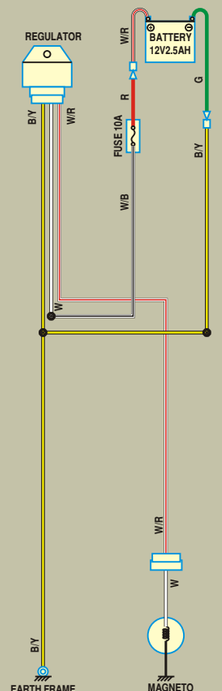
REAR SPROCKET WARP

Standard	---
Service Limit	TIR 0.5

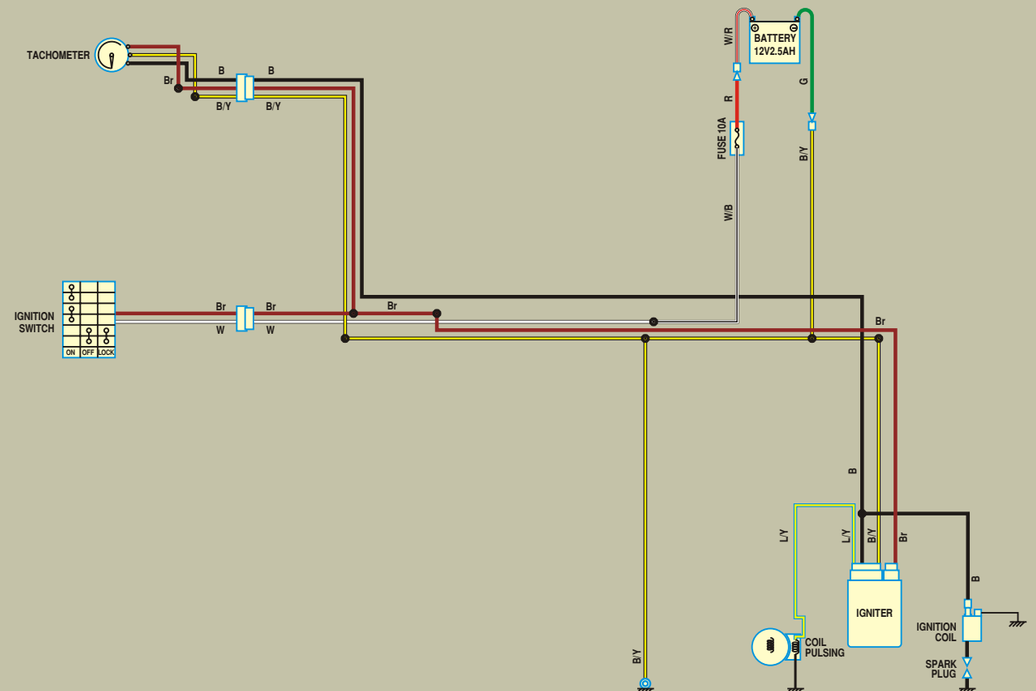
WIRING DIAGRAM



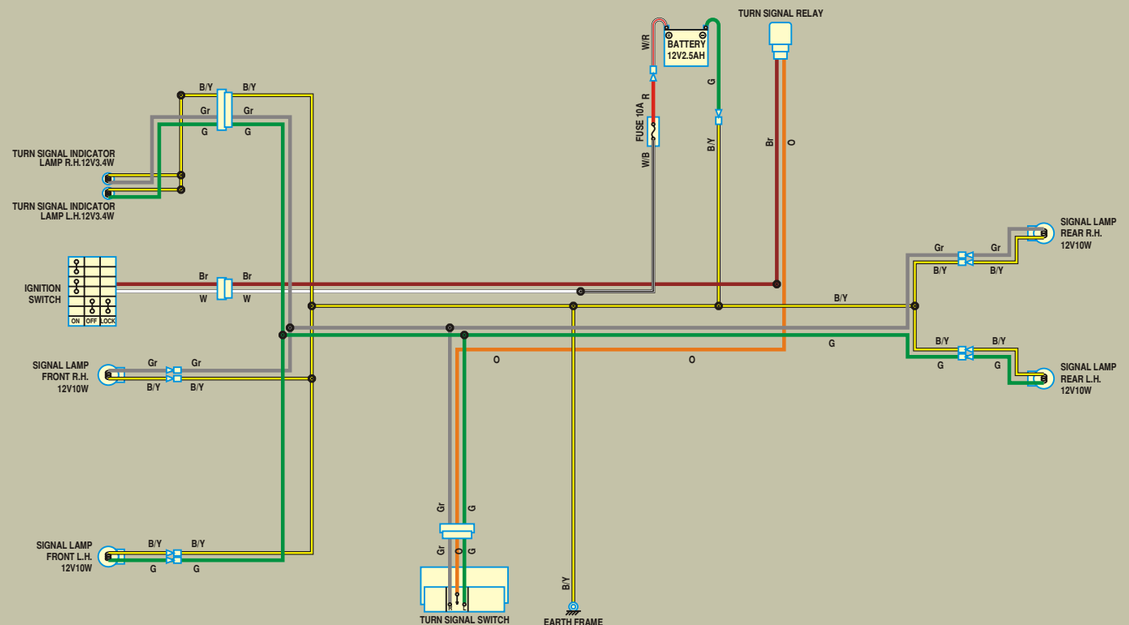
CIRCUIT DIAGRAM - BATTERY CHARGING CIRCUIT



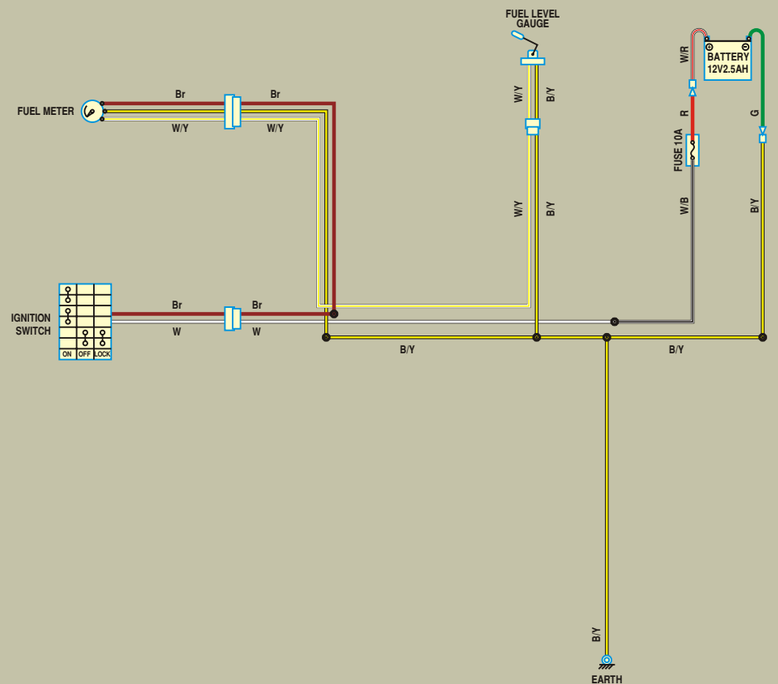
CIRCUIT DIAGRAM - IGNITION CIRCUIT



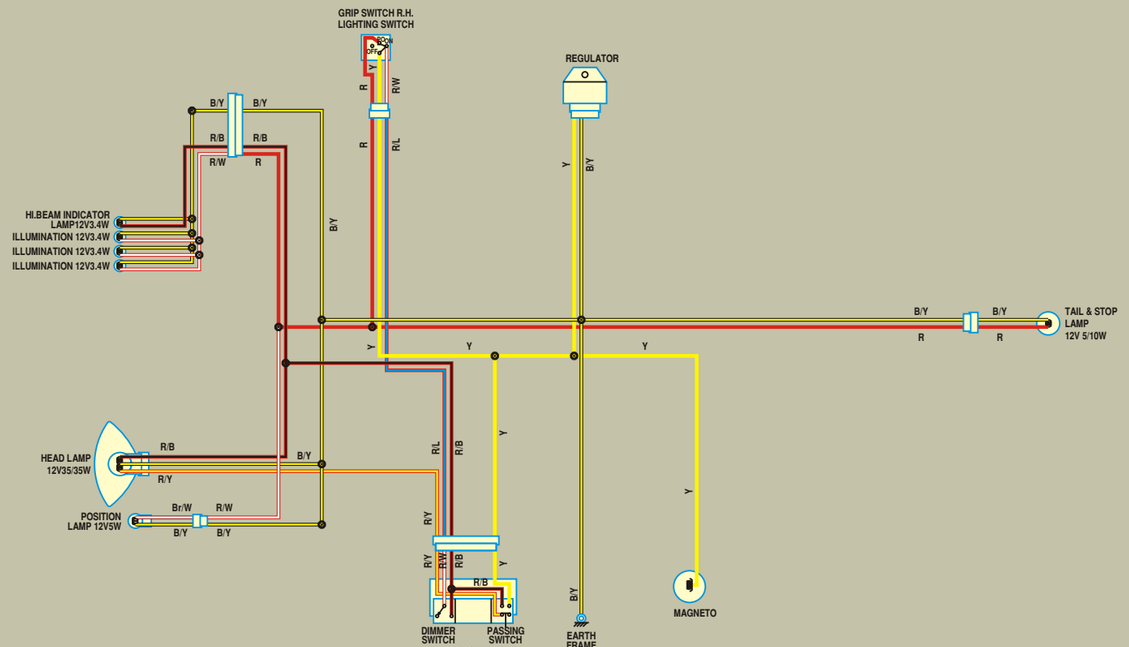
CIRCUIT DIAGRAM - SIDE INDICATOR CIRCUIT



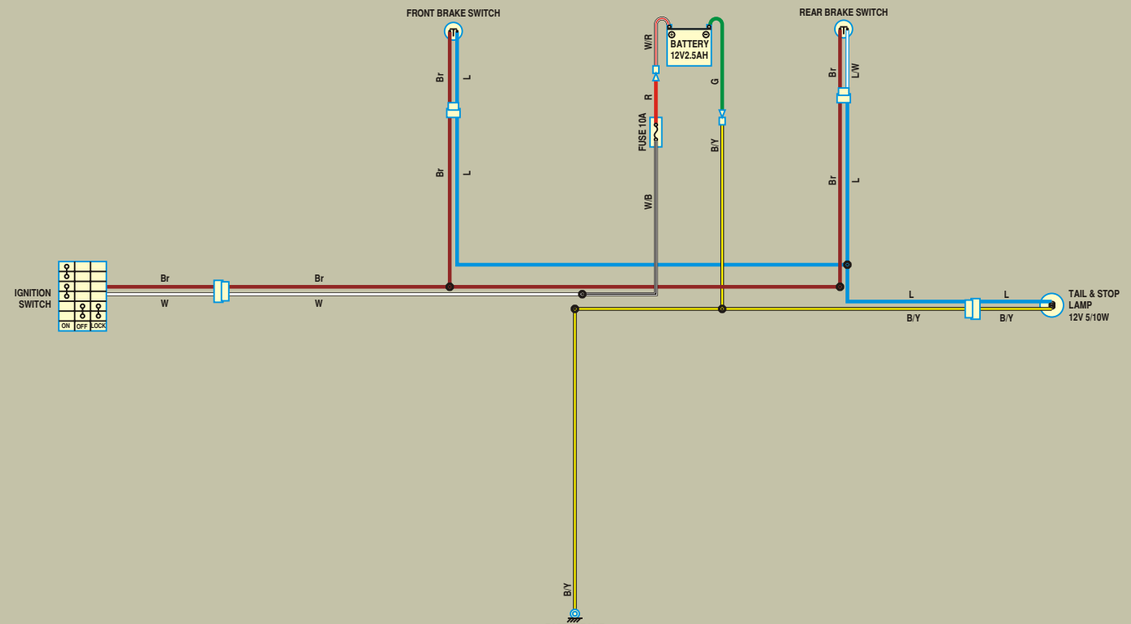
CIRCUIT DIAGRAM - FUEL METER CIRCUIT



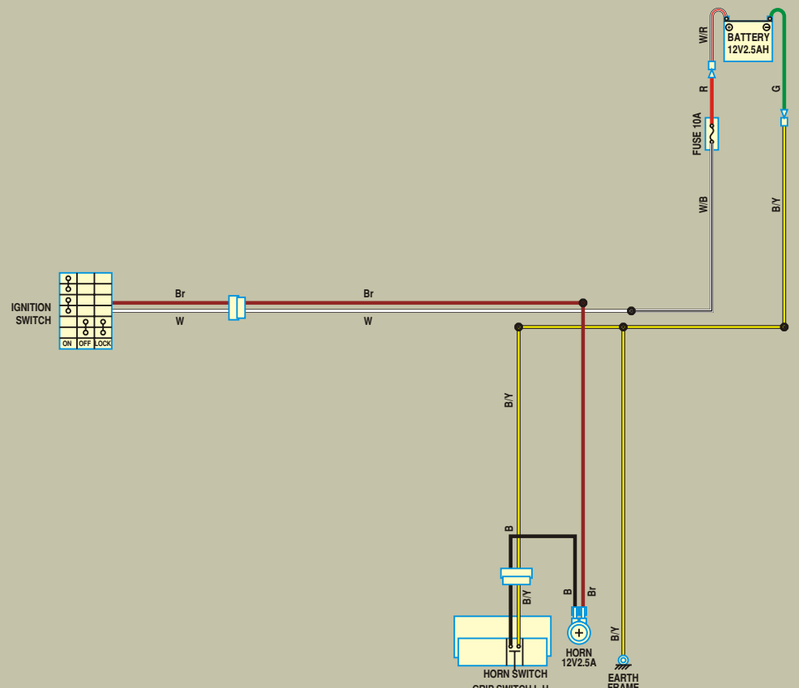
CIRCUIT DIAGRAM - A.C. LIGHT CIRCUIT



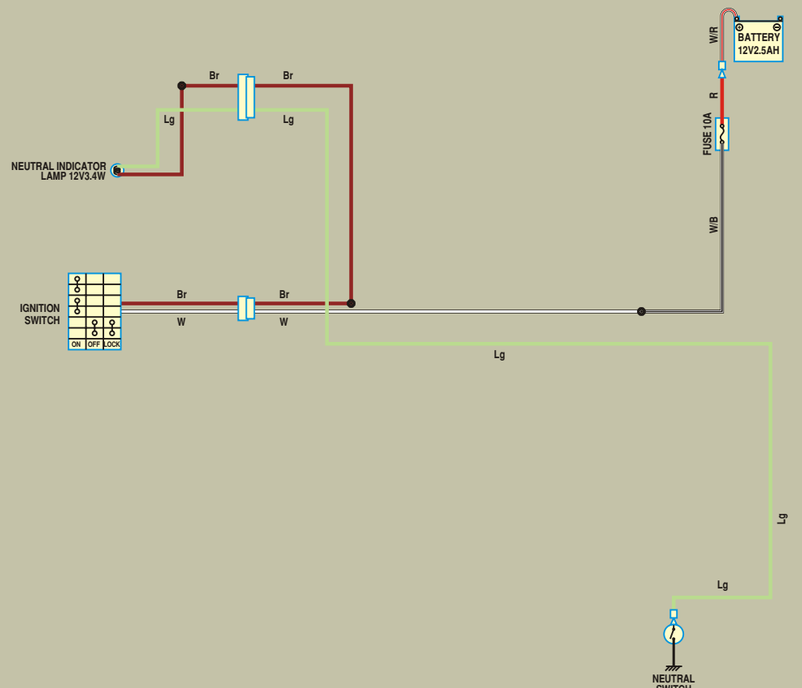
CIRCUIT DIAGRAM - BRAKE LIGHT CIRCUIT



CIRCUIT DIAGRAM - HORN CIRCUIT



CIRCUIT DIAGRAM - NEUTRAL CIRCUIT



RESISTANCES

Pickup coil :

Range (Ohms)	Connections		Reading (Ohms)
	Meter +ve	Meter -ve	
X 10	Blue	Black	108-132

Battery charging coil :

Range (Ohms)	Connections		Reading (Ohms)
	Meter +ve	Meter -ve	
X 1	White	Black	0.6 ± 0.2

Lighting coil :

Range (Ohms)	Connections		Reading (Ohms)
	Meter +ve	Meter -ve	
X 1	Yellow	Black	0.5 ± 0.2

Rectifier & Regulator Assembly

AC voltage measurement

Range	Meter +ve	Meter -ve	Reading
AC 25V	Yellow	Black/Yellow	13-14 Volts at 4000 rpm

DC charging voltage measurement

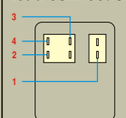
Range	Meter +ve	Meter -ve	Reading
DC 25V	White wire of RR unit	Battery -ve terminal	13-15 Volts at 4000 rpm

DC charging current measurement

Range	Meter +ve	Meter -ve	Reading
20 A	White wire of RR unit	Battery +ve terminal	1-2 Amp. at 4000 rpm

CDI Unit (Use KUSAM-MECO MODEL 603 Digital Multimeter)

Range X 1k ohms	Meter positive (+ve) lead connection				
Meter negative (-) lead connection	- \ +	1	2	3	4
	1		100-500	∞	20-500
	2	∞		∞	20-200
	3	∞			∞
	4	20-200	20-200	∞	



WARRANTY & SERVICES

Sr. No.	Service Type	km/days *
1	1 Free	750 - 1,000 km or 30 days.
2	2 Free	2,500 - 3,000 km or 365 days.
3	3 Free	5,500 - 6,000 km or 365 days.
4	4 Free	11,500 - 12,000 km or 365 days.
5	5 Free	17,500 - 18,000 km or 715 days.
6	6 Free	23,500 - 24,000 km or 715 days.
7	Paid	29,500 - 30,000 km or 715 days.
8	Paid	35,500 - 36,000 km or 715 days.
9	Paid	39,000 - 39,500 km or 715 days.

Note : All services include oil change except 2nd service.

Check & Top-up oil at every 3,000 km

Dealers to contact customers (before expiry of warranty) inspect the vehicle thoroughly and resolve all issues. Further offer AMC.

* Whichever occurs earlier.

WORKING OF BSV, SAI & PCV

BSV (By pass switching valve) :

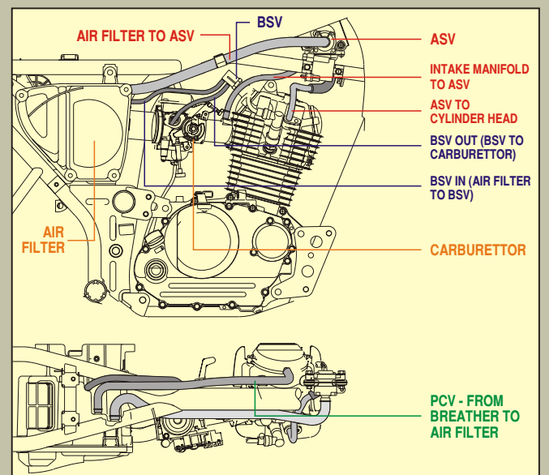
BSV is fitted on intake tappet cover. The overall function of this valve is to enrich the air-fuel mixture during cold start condition for better driveability. This valve is designed to do the above function till the engine reaches a specified temperature i.e. 50° C. Till the specified temperature is achieved, the BSValve remains closed. After the specified (50°C) temperature is reached the valve opens automatically allowing for air to flow through it & restores the normal air fuel mixture. The effectiveness of BSV can be checked by pinching tube from BSV to Carburettor, when Tube is pinched, the CO value increases & vice versa. Please note that for above check Engine temperature should be above 50°C.

SAI (Secondary Air induction): To reduce CO Level in exhaust gases

- SAI is an effective way of reducing Carbon Monoxide (CO) level in the exhaust gas. This is achieved by introducing fresh air in the exhaust port. At exhaust port, temperature is achieved for the Oxidation of Carbon Monoxide.
- Fresh & filtered Air from Case Air Filter flows continuously through Pipe/Tube & Diaphragm allows this Air to enter inside the ASV assly.
- Due to exhaust gas pulses, the Reed valve inside the ASV assly opens & the fresh air is inducted into exhaust port. This leads to dilution of Carbon Monoxide due to oxidation.
- During sudden deceleration, negative pressure created in intake manifold is applied on Diaphragm valve in ASV assly, the Diaphragm valve then stops air supply from Air cleaner to exhaust port. This avoids "After fire".
- The effectiveness of SAI can be checked by pinching (press by hand) the Tube from ASV assly to Cylinder head while checking idling CO, when Tube is pinched, the CO value increases & vice versa.

PCV (Positive Crankcase Ventilation) : To reduce crankcase emission (oil fumes, blow by)

- In this system Crankcase emission (oil fumes & blow by which are harmful) are re-circulated into intake system. This is achieved by connecting Crankcase breather to Air filter.
- The oil fumes & blow by get condensed into Air cleaner & get drained from drain tube fitted to Air filter.
- This system also avoids dust entry through Breather Pipe into the engine.



TROUBLE SHOOTING FOR SAI & BSV SYSTEM

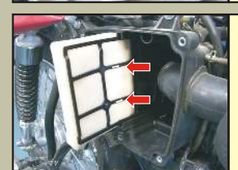
SR. NO.	SYMPTONS	PROBABLE CAUSES	REMEDIES
1.	Misfiring	Any pipe of SAI loose or leakage or has come out.	Check total routing for any cracks/leakage/ plucking. Fit the pipe if okay or replace the pipe.
2.	Idling CO % more than the specified level.	Leakage in SAI system due to cracks or improper fitment.	Check & fit the pipes properly if okay or replace if found damaged.
3.	Engine stalling at idling.	Leakage in SAI system due to cracks or improper fitment.	Check & fit the pipes properly if okay or replace if found damaged.
4.	Cold starting problem	Check if BSV jet on Carburettor is missing or loosely fitted. Check for all air filter connections. There are two openings provided on air filter. Pipe is fitted on one opening & the other other opening is pluged with a plug. Check if this plug is missing. Check if BSV connections & BSV system for proper functioning. If the BSV system is working properly then the CO level at cold condition should be more than the specified CO level. If the BSV system is not functioning properly then the idling CO at cold condition will be very low or fluctuating.	Fit the BSV jet properly or fit a new BSV jet on the Carburettor. Fit the plug on air filter. Check & replace BSV if not found okay.
5.	CO level showing same in hot & cold condition.	BSV damaged.	Replace BSV.

IMPORTANT ENGINE ASSEMBLY TIPS

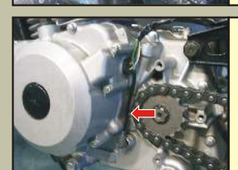
Bolt for Sprocket has **LEFT HAND THREAD.**

Before removing Sprocket, remove **ROLLER CAREFULLY.**

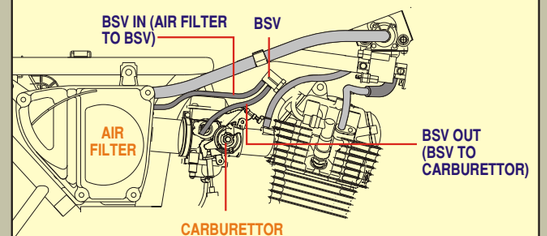
While assembling Sprocket, do not forget to insert **ROLLER.**



While assembling Air Filter Element, Ensure that **ARROW MARK** given on **HOLDER** should face inside.

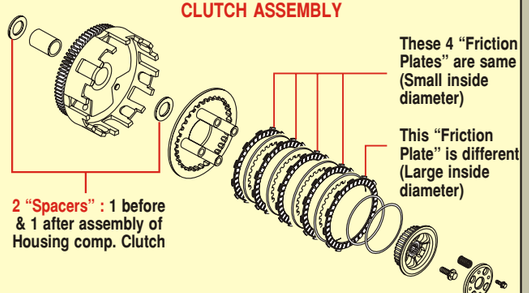


Ensure that cable for **NEUTRAL SWITCH** should be routed as shown. It should not trapped.



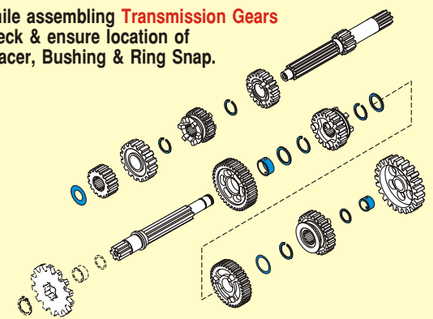
Refer above figure while fitment of **BSV TUBES** to Air Filter & Carburettor

CLUTCH ASSEMBLY



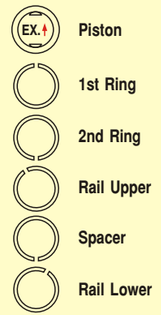
IMPORTANT ENGINE ASSEMBLY TIPS

While assembling **Transmission Gears** check & ensure location of Spacer, Bushing & Ring Snap.

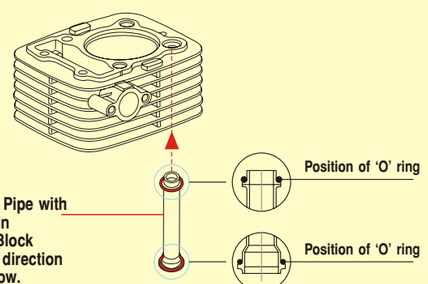


Assembly of Piston Ring

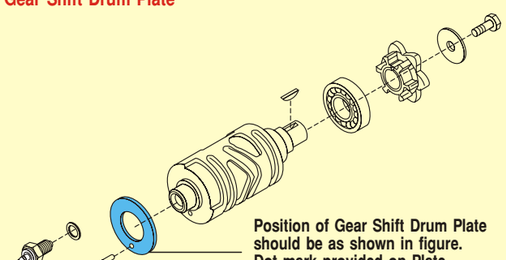
Please ensure location of "Close gap of piston ring" on Piston while assembling as shown in figure.



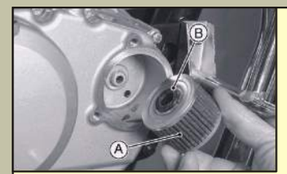
Oil Pipe Assembly in Cylinder Block



Gear Shift Drum Plate

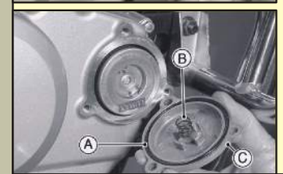


IMPORTANT ENGINE ASSEMBLY TIPS



Oil Filter Assembly

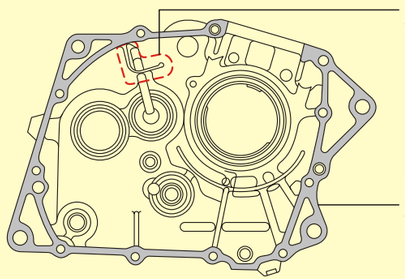
While assembling Oil Filter, ensure that Grommet (B) is properly fitted on Oil Filter. Grommet face to inside as shown in figure.



Oil Filter Cover Assembly

Inspect the 'O' ring (A). Replace if it is damaged. Install the Spring (B) & the Cover (C) and tighten the cover bolts.

Crankcase LH



Do not apply Liquid Gasket to this area.

Apply Liquid Gasket to area shown in Grey Colour.

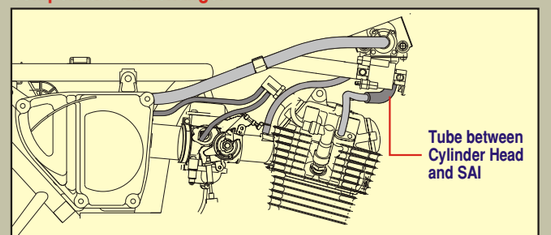
CO% CHECKING & TUNE-UP (To ensure better mileage)

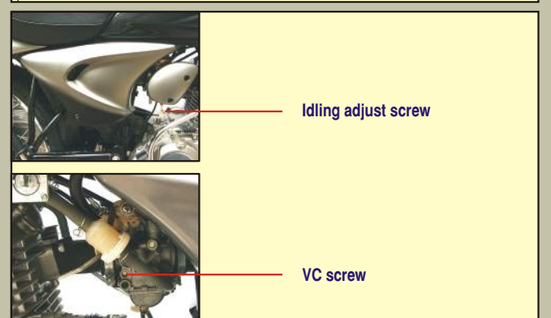
Check following before CO% checking / Tune up

- Air filter connections (check all pipes connected to BSV & SAI)
- Spark plug gap (0.6 to 0.7 mm)
- All pipes & connections of SAI & BSV for any cracks, leakage, plucking, pinching & loose connections.
- **CO% checking & Carburettor VC screw setting**
  - Start & warm up the engine.
  - The oil temperature should be above 50°C. This can be achieved by running vehicle in top gear at the speed of minimum 40 kmph. for 4 - 5 km
  - Pinch the tube between Cylinder head & SAI.
  - Adjust the engine speed to 1200 to 1250 rpm with Idling adjust screw of carburettor keeping tube (between Cylinder & SAI) pinched.
  - Adjust the CO with the VC screw. It should be 2.0 to 3.0% keeping tube (between Cylinder & SAI) pinched.
  - Confirm the engine speed whether it is within 1200 to 1250 rpm or not. If not O.K. adjust to 1200 to 1250 rpm by idling adjust screw keeping tube (between Cylinder & SAI) pinched. **Do not disturb VC screw & Idling screw setting.**

After the adjustment, remove pinch of tube between Cylinder Head & SAI.

Note : After connection of SAI tube is restored (SAI in working condition). The CO% will be around 0.5 to 1.0 & engine speed will be around 1400 to 1550 rpm. This confirms that SAI is working properly. **Do not disturb VC screw & Idling screw setting to compensate this change.**





FREQUENTLY ASKED QUESTIONS (FAQ'S)

What is the difference between 'Wind 125' & Caliber 115?

Apart from aesthetic looks and style, 'Wind 125' has higher capacity engine, aided with advanced technologies.

- 'Wind 125' has 125 CC (124.60) engine, with
- Secondary Air Injection (SAI) System
- By Pass Switch Valve (BSV) System
- Positive Crankcase Ventilation (PCV) System
- DC Ignition System with Digital controlled Igniter
- Constant Vacuum (CV) carburettor
- 5 speed Transmission System

What are the performance specification of 'Wind 125'?

'Wind 125' delivers

- 10.8 BHP of power
- 9.8 N-m of torque
- Consistent & smooth pickup due to CV Carburettor

What is DC Ignition system?

DC Ignition system works on Battery. It means the current is supplied to the spark plug from battery and not from the magneto. This gives consistent high intensity current of all the engine rpm.

The advantages of DC Ignition are

- Better startability
- Improved combustion of air fuel mixture

Can we start the engine of 'Wind 125' without battery or weak Battery?

No We can not start without battery or with discharged battery. Battery must be 9 volt and above in its health. Good condition of the battery is essential for better performance.

What is CV carburettor? What is its advantage?

The CV carburettor works on the constant vacuum principle. Here the venturi is opened depending on the vacuum available on the engine side and not by the throttle grip directly.

The advantages are

- Better throttle response as the air fuel mixture is supplied depending upon the engine vacuum.
- Consistent power delivery
- Better low end torque

What is Secondary Air Induction (SAI) System?

It is a system, in which fresh atmospheric air is introduced into the burnt gases past exhaust valve in the cylinder head.

This dilutes carbon monoxide in the burnt gases by oxidation and controls emission level at the silencer tail end.

Thus SAI system helps in minimising pollution.

What is Positive Crankcase Ventilation?

It is an advanced technology in which the hot fumes from the engine crankcase flows to the air filter assembly and get condensed to become oil droplets.

It avoids scattering of hazardous engine oil fumes in to the atmosphere. Thus reduces the pollution.

It also avoids entering of dust particles from the atmosphere in to the engine through breather pipe, thus eliminating contamination of engine oil, which further minimises wear and tear of engine components and ensures their life.

What is Low-end Torque?

It is nothing but torque available at lower engine RPM.

FREQUENTLY ASKED QUESTIONS (FAQ'S)

How this higher capacity and higher power engine delivers good mileage?

The major contributors for good mileage are

- CV carburettor
- DC ignition system with digital controlled Igniter

The CV carburettor ensures accurate supply of air fuel mixture at all the engine load and speed.

The digital controlled Igniter introduces spark at accurate timing in the cylinder and the DC ignition delivers high intensity current to burn the mixture effectively and completely.

Why 5 speed transmission is incorporated in 'Wind 125' instead of 4 speed? OR How come the max. speed is 100 kms/hr (similar to Caliber 115) inspite of 5 speed transmission?

The idea of going for 5 speed transmission is to utilise the higher power effectively to achieve better pick up at all level of speeds without loosing performance.

The increased gear allows closer gear ratios between next gears. This enables to achieve consistent pick up at lower engine rpm at different cruising speeds.

How is it possible to kick start the engine even after pressing the clutch lever?

In 'Wind 125', the kick mechanism has a direct drive through a separate path to the crankshaft and not through gear transmission and clutch.

As the transmission and clutch plates are not in the drive flow. It can be started inspite of pressing the clutch lever.

This is similar to Pulsar and Eliminator kick drive mechanisms.

In Caliber and Boxer the Kick mechanism is through transmission and clutch, where engagement of clutch is essential for starting the engine.

What is Opto-prism Headlamp?

It is a combination of clear lens headlamp glass and a multi focal reflector. The multifocal reflector intensifies the lighting for laser sharp focus.

Can head light Flasher (Passing light) is used during night riding?

Yes. It can be used provided headlight is ON in Low Beam. If it is ON in High Beam, then Dipper Switch can be used.

What is the advantage of Zapper Tyre?

The Zapper tyres have an advantage of –

- Enhanced road-gripping characteristics on different kind of roads.
- Better road stability in riding.
- Anti-skidding characteristics for safer riding during cornering.

IMPORTANT TIPS / OBSERVATIONS

IMPORTANT TIPS / OBSERVATIONS

IMPORTANT TIPS / OBSERVATIONS

IMPORTANT TIPS / OBSERVATIONS

IMPORTANT TIPS / OBSERVATIONS