BAJAJ
Bajaj Auto Limited
Distinctly Ahead

New Product Bulletin	
Product Category	**Motorcycle**
CC Group	**125 to 149 cc**
Bulletin No.	**NP: 15**
Date	**16/12/2009**

TO:

All Dealers / Authorized Service Centers - 2 Wh
Spare Parts Dealers & Distributors

Sub: Introduction of "Bajaj Pulsar 135 LS"

Dear Sirs:

We are pleased to introduce **'Bajaj Pulsar 135 LS'** a light sport bike. The unique features are –

- 4 Valve engine with DTS-i & ExhausTEC technology
- Aerodynamic, Attractive styling & Sporty stance.

We enclose herewith following information on this new bike, which gives you insight on product features, maintenance details etc.

Product related information

1. Salient Features	Annex – 1
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Maintenance related information

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Please go through the above information. Ask your workshop & spare parts managers to share the same with all staff and act upon the points as per action matrix enclosed.

Thanking You,

Yours faithfully,

Dhiraj Mullick,
Senior Manager (Service Support) 2Wh

Cc to: Field Service Team/RTC team/RMs (Ser.)/RSMs/Technical Service Team

Annex - 1

Salient Features

Attribute	Key Features	Advantages & Benefits
Performance		
Engine	• 4 Valve Engine with DTS-I & ExhausTEC • Molycoat piston for reduced friction • Nozzle oil jet in lubrication circuit • 5 Speed Transmission • DC Ignition with Digital multi map CDI • Continuous type TPS and Auto Choke • Electric start • Engine power : 13.5 PS • Engine torque : 11.4 Nm	Innovative & advanced technology engineered for the best engine performance at all engine speeds - • More powerful & More fuel efficient • Friction less operation of piston • Better life of engine components • Light weight. Absolute joy to ride. • Complete utilization of high engine torque & better drive-ability
Style		
	• Aerodynamic Sporty stance • Muscular petrol tank with spoilers & aads • Aerodynamic side covers • Clip on handle bar • Split seats & 2 piece grab rail • New generation head lamp • 3 piece attractive fairing with louvers • Twin pilot lamps & Black visor	• Stylish & Sporty looks • Perfect Light Sports bike with • premium looks. • Sporty stance
Comfort & Convenience		
	• Digital Speedometer • Trip meter • Low battery indicator • Telescopic front fork with anti-friction bush & 130 mm stroke. • Nitrox - gas filled rear shockers with 105 mm wheel travel • MF battery (ES version) with unique vent mechanism.	• Accurate display of speed & distance covered and consumes minimum battery power • Easy to record trip distance. • For maintaining battery in healthy condition. • Comfortable ride on any type of roads and for any distance. • Better life of front fork oil seal & other parts of fork. • Plush ride comfort for rider as well as pillion on all road conditions. • No hassle of frequent topping up of battery.
Safety		
	• Robust single down tube frame with longest wheel base - 1325 mm - in its class of motorcycles. • 240 mm dia front disc brake & 130 mm dia rear brake drum. • Powerful head light, Number plate lamp, and Pass switch. • Alloy wheels & unidirectional tyres 100/90 wide rear tyre. • DC Lighting system	• Safe to drive on highway. • Safe night driving. • Safe overtaking. • Easy to maneuver and safe to drive. No maintenance of spoke tightening.. • Safe to drive on highway. • Constant bright beam from head light even at low engine / vehicle speed.

Annex - 2

Technical Specifications

ENGINE & TRANSMISSION

Type	Four stroke, Natural air cooled
No. of cylinders	One
Bore	54.00 mm
Stroke	58.8mm
Engine displacement	134.66 cc
Compression ratio	9.8 :1
Idling Speed	1400 ± 100 rpm
Max. net power	13.5 PS @ 9000 rpm
Max. net torque	11.4 Nm @ 7500 rpm
Ignition System	DC, Microprocessor Controlled Digital CDI with TPS
Ignition Timing	Variable Timing with Multiple maps
Fuel	Unleaded Petrol, 87 RON Minimum
Carburettor	BS26 with Continuous TPS
Spark Plug	Champion PRZ9HC & BOSCH UR4AC (Resistive)
Spark Plug Gap	0.6 to 0.7 mm
Lubrication	Wet sump, Forced Lubrication
Starting	Kick & Electrical Start
Clutch	Wet, Multi Disc Type
Transmission	5 Speed Constant Mesh.
Primary reduction	3.75 : 1 (75/20)
Gear Ratios(Overall)	
1st Gear	30.458 : 1 (34/12)
2nd Gear	19.603 : 1 (31/17)
3rd Gear	14.333 : 1 (28/21)
4th Gear	11.685 : 1 (25/23)
5th Gear	9.773 : 1 (20/22)
Final Drive Ratio	2.86 : 1 (43/15)

CONTROLS

Steering		Handlebar
Accelerator		On handle bar, RH grip.
Gears shift		Left foot pedal operated, Step Shift
Brakes	Front	On handle bar, RH lever.
	Rear	Pedal operated by RH foot.

ELECTRICALS

System	12 V (DC)
Battery	12 V 5 Ah MF Battery
Head lamp	12 V 35/35 W, HS-1 (Halogen)
Tail / Stop lamp	LED Type
Side Indicator lamp	12 V 10 W (4 Nos-Amber Bulbs)
Pilot Lamp	12 V 5 W (2 Nos.)
Rear No. plate lamp	12 V 5 W
Speedometer lamp	LCD black light Amber
Neutral Indicator	LED (Green)
Turn Signal Indicator	LED (Green)
Hi-beam Indicator	LED (Blue)
Reserve Indicator	LED (Red)
Horn	12 V DC, Type 2A
Fuel gauge	TFR Type

DIMENSIONS

Length	1995 mm
Width	765 mm
Height	1045 mm
Wheel base	1325 mm
Saddle height	800 mm
Turning Circle Radius	2300 mm (min)
Ground clearance	170 mm

CHASSIS & BODY

Frame Type		Single down tube type.(Diamond)
Suspension		
	Front	130 mm Fork travel, Telescopic
	Rear	105 mm Rear Wheel travel, Nitrox
Brakes	Front	Hydraulic operated disc type
	Rear	Mechanically expanding shoe & drum type
Brake Size		
	Front	240 mm Disk brake
	Rear	130 mm Drum brake
Tyres	Front	2.75 x 17, 41 P, Unidirectional
	Rear	100 x 90 -17, 55 P, Unidirectional
Tyre Pressure		
	Front	1.75 Kg / cm^2 (25.0 PSI)
	Rear (Solo)	2.00 Kg / cm^2 (28.00 PSI)
	Rear (with Pillion)	2.25 Kg / cm^2 (32.0 PSI)
Rim	Front	1.4 x 17" Die Cast Al. Alloy
	Rear	2.15 x 17" Die Cast Al. Alloy
Fuel Tank Capacity		8.0 Liters
Usable Reserve		1.6 Liters
Unusable Reserve		0.9 Liter

WEIGHTS

Vehicle kerb weight	122 Kg
Gross vehicle weight	252 Kg

PERFORMANCE

Maximum speed	115 Kmph (with single rider 68 Kg)
Climbing ability	26%

NOTES

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

Annex - 3

Frequently Asked Questions

What are the distinct features of 'Pulsar 135 LS'?

Distinct Features :

- **Engine:** In addition to the proven DTS-i engine with ExhausTEC technology, It has following key features.
  - ➡ **4 Valve** engine for optimization of volumetric efficiency & improved scavenging process.
  - ➡ **Oil jet** for piston cooling.
  - ➡ **Molycote piston**
  - ➡ **Electric start** for feather touch starting of the engine & **DC Ignition** system.
  - ➡ **Auto Choke** that enables quick start of the engine even in severe cold condition.
  - ➡ **Highest power to weight ratio** in its class of motorcycles.

- **Styling:** 'Pulsar 135 LS' wears a new Sporty look that has following aesthetics
  - ➡ New generation Head lamp with **Stylish fairing**
  - ➡ Attractive petrol tank **with unique spoilers & side covers**
  - ➡ Stylish **Split seats**
  - ➡ **Clip on** Handle Bar
  - ➡ **2 piece grab rail**
  - ➡ LED tail lamp
- **Front fork with anti friction bush & Nitrox (gas filled) rear shockers** for most comfortable & smooth ride
- **Bigger Tyres & longest wheel base in its class of motorcycles –** Widest rear tyre (100/90 – 17" 55P) & 1325 mm wheel base for the best road grip & safe highway driving.

What LS stands for in the brand name of the bike?

LS stand for "Light Sports".

What are the advantages of 4 Valve engine incorporated on 'Pulsar 135 LS'? OR

4 Valve engine will have following advantages.

- ➡ Optimized intake of fresh air fuel mixture and disperse of exhaust gases.
  - • Better Power
  - • Better Fuel Efficiency
  - • Low Emissions
- ➡ Better Power to Weight Ratio
- ➡ No limitation of engine RPM – 4 valve engine doesn't have RPM limitation that a 2 - valve engine has.

How come 'Pulsar 135 LS' being 135 cc delivers power near to 150 cc engine? OR

How 'Pulsar 135 LS' delivers better engine performance?

'Pulsar 135 LS' has a DTS-i engine with 4 Valves, 2 Intake & 2 Exhaust valves.

With all other proven technology of DTS-i breed, the 4 Valve incorporated in the engine helps in supplying more volume of air-fuel mixture & better evacuation of burnt gases which leads to –

- ➡ Optimized volumetric efficiency & improved scavenging process.
- ➡ Very less scavenging losses

- Thus 'Pulsar 135 LS' engine delivers more power & better performance.

Why only Pulsar 135 LS is having 4 valve engine whereas other Pulsars still come with 2 valve engine?

- 'Pulsar 135 LS' being a "Light Sports" bike needs light weight & compact engine. The 4 valve engine technology developed by Bajaj Auto gives cutting edge to 'Pulsar135 LS' over 2 valve engine in terms of power & pick up – engine performance when compared with similar capacity 2 valve engines.
- Other Pulsars are heavy sports bikes & having regular 2 valve engines of higher capacities.
- Pulsar 135 LS shows a glimpse of future Pulsars to come.

Can existing *Pulsar 150 / 180 DTSi* bike be converted into *4 valve* technology?

- No. It is not possible.

Is the life of 4 valve engine compromised since the engine delivers high performance?

- Absolutely No. 4 valve engine components are made of superior material composition and are well designed to withstand higher engine power, torque - performance.
- Moreover, a great amount of durability & reliability work ensures that there will be no impact on the life of the engine.
- **4 Valve technology is tried and tested under extreme conditions by Bajaj Auto Ltd.**

Is the running & maintenance cost of 4 Valve engine is higher than that of regular 2 Valve engine?

- Absolutely No.
- In fact, the mileage of the bike is better than equivalent capacity 2 valve engine if driven sanely.
- The maintenance cost is similar to 2 valve engine.

Is 4 Valve technology adopted by any other 2 wheeler manufacturer?

- No.
- Bajaj has always been the pioneer with indigenous new technology – by Indians for Indians. This is an area where Bajaj has always been distinctly ahead.

What is the difference between 'Pulsar 150 DTSi' and 'Pulsar 135 LS'?

- Pulsar 150 DTSi is engineered to deliver more power (14.09 ps @ 8500 rpm) & torque (12.76 Nm @ 6500 rpm) while Pulsar 135 LS is designed to deliver power of 13.5 ps @ 9000 rpm & torque 11.4 Nm @ 7500 rpm.
  - Pulsar 150 DTSi is having 150 cc bigger 2 valve engine while Pulsar 135 LS is having compact & light weight smaller capacity 4 valve engine – 135 cc.
  - Pulsar 150 DTSi is a complete sports bike while Pulsar 135 LS is a light sports bike.
  - Pulsar 150 DTSi is having heavy black colour engine & alloy wheels while Pulsar 135 LS is having silver colour engine & black alloy wheels.

What is the benefit of Auto Choke?

- Basically the choke is a system of carburetor, which enables easy engine starting in cold condition. In case of manual choke, if rider forgets to put off choke, this effects on fuel efficiency adversely.
- However, in Auto choke system incorporated on 'Pulsar 135 LS' <u>no manual intervention</u> is required for switching 'On' or 'Off' the choke. <u>It operates automatically as per the need of engine</u>.

- **How does DC ignition / Lighting system work? What are its advantages?**
- Both Ignition & Lighting works on Direct Current (DC) supplied by the Battery and not directly from the AC current generated by Magneto.
- Advantages of DC Electrical System -
  1. Easy & quick starting of engine – due consistent power supply even at low engine rpm
  2. Consistent engine performance – Power, Pick up, Mileage
  3. Constant bright beam of head light even at very low engine / vehicle speed

- **Would it be possible to start the engine if Battery is discharged or the fuse is blown-off?**
- Yes. DC electrical system of 'Pulsar 135 LS' is designed in such a way that engine can be started by kick even if battery is discharged or fuse gets blown off. <u>But it is advised to get the battery charged immediately if found discharged.</u>

- **In case, battery is disconnected or removed and given for charging to service center, can the bike be started?**
- <u>No. this should not be done.</u>
  Though engine can be started without battery, it should not be done since the electrical & electronic components of vehicle would get damaged due to electrical surge.

- **Does DC system vehicle cost more in maintenance?**
- No. It is important to ensure Good health of battery that's all!

Annex - 4

Comparison with Competition Vehicles

Description	**'Bajaj Pulsar 135 LS'**	Hero Honda Passion Pro	Hero Honda Glamour	Honda Shine	Honda Stunner	**Advantages of 'Bajaj Pulsar135 LS'**
POWER AND PERFORMANCE						
Engine Cubic Capacity	**4 Stroke 134.66 CC**	4 Stroke 97.2 CC	4 Stroke 124.7 CC	4 Stroke 124.6 CC	4 Stroke 124.7 CC	4 valve DTSi engine engineered for the best performance.
Engine Horse Power	**13.5 PS @ 9000 rpm**	7.5 PS @ 8000 rpm	9.13 PS @ 9000 rpm	10.44 ps @ 7500rpm	11.15 ps @ 8000 rpm	
Engine Torque	**11.4 Nm @ 7500 rpm**	7.95 Nm @ 5000 rpm	10.35 Nm @ 4000 rpm	10.9 Nm @ 5500 rpm	11 Nm @ 6500 rpm	
Transmission	**5 Speed**	4 Speed	4 Speed	4 Speed	5 Speed	• Utilization of high torque of engine.
Max Speed	**115 Kmph**	Not specified	85 Kmph	90 Km/h	Not specified	Highest in the class.
Ignition System	**DC Multi map CDI**	Electronic CDI	CDI	CDI	DC Multi map CDI	Seamless changes in ignition maps according to change in vehicle load. Quick & effort less engine starting.
TRICS	**Yes**	Not available	Not available	No	No	
Exhaust System	**Yes**	No ExhausTEC	No ExhausTEC	No ExhausTEC	No ExhausTEC	High engine torque & knock free engine.
Starting Mechanism	**Electric + Kick Start**	Kick Start (Electric Start Optional)	Electric + Kick Start	Electric + Kick Start	Electric + Kick Start	Soft & easy self start.
Kerb Weight	**122 Kg**	116 Kg(SS)	129 Kg	122 kg	129 Kg	Light Weight & Robust
Power to weight ratio	**110.65 ps/ton**	64.99 ps/ton	69.77 ps/ton	84.43 ps/ton	85.27 ps/ton	Highest power to weight ratio in it class of motorcycles.

Description	**'Bajaj Pulsar135 LS'**	Hero Honda Passion Pro	Hero Honda Glamour	Honda Shine	Honda Stunner	**Advantages of 'Bajaj Pulsar 135 LS'**
STYLE						
Styling	**Sporty Looks**	Conventional	Conventional	Conventional	Over done	• Sporty looks • The best in its class of bikes
Graphics	**Unique Graphics**	Regular Graphics	Regular Graphics	Regular Graphics	New	
Head Light with Fairing	**Fairing with visor.**	Regular design	Old fashioned fairing	Regular design	• Macho looks • Sporty looks	
Tail Lamp	**LED**	Regular	Regular	Regular	Regular	Minimum consumption of battery energy. Long life.
Rear Number Plate Lamp (For clear visibility)	**YES**	NO	NO	NO	NO	Clear visibility even from long distance.
Twin Prismatic Pilot Lamps	**Twin Pilot lamp**	NO	NO	NO	Twin Pilot lamp	• Add to looks. • Safe drawing during drawn & dusk.
COMFORT AND CONVENIENCE						
Front Suspension	**Front Telescopic Fork 130 mm (Stroke)**	Telescopic Fork.	Telescopic Fork.	Telescopic Fork.	Telescopic Fork.	Longest suspension travel in its class of bikes.
Rear Suspension	**Nitrox (Gas Filled) Suspension With 105 rear wheel travel 5 step adjustable**	Hydraulic rear shock Absorbers. 5 step. adjustable	Hydraulic rear shock Absorbers.	Hydraulic rear shock Absorbers. 3 step. adjustable	Hydraulic rear shock Absorbers. 3 step. adjustable	The best ride comfort on any type for any distance.
Auto Choke	**YES**	NO	NO	NO	NO	Easy & quick engine starting even in serve cold conditions.

Description	**'Bajaj Pulsar135 LS'**	Hero Honda Passion Pro	Hero Honda Glamour	Honda Shine	Honda Stunner	**Advantages of 'Bajaj Pulsar 135 LS'**
COMFORT AND CONVENIENCE						
Battery	**MF- Low Maintenance**	Regular	Regular	Regular	Regular	No hassle of frequent topping up of electrolyte level.
Low Battery indicator	**YES**	NO	NO	NO	NO	Reminds riders to charge battery in time.
Trip Meter	**YES**	NO	Yes	NO	Yes	For recording Km reading during a trip/tour.
OTHER FEATURES						
Frame	**Diamond Frame**	Tubular double cradle	Tubular double cradle	Diamond Frame	Diamond Frame	Light weight & Robust. Excellent vehicle dynamics. Road grip & stability.
Fuel Tank Capacity	**8 Liters(2.5 ltr. Res)**	12.8 Liters(1.1 Ltr. Res.)	13.6 Liters(2.5 Ltr. Res)	11 Liters(1.3 Ltr. Res)	10 Liters (2Ltr. Res)	
Wheels	**Aluminum Alloy Wheels**	Alloy Wheels	Alloy Wheels	Alloy Wheels	Alloy Wheels	Nimble handling & better agility.
Tyres	**Front 2.75 x 17", 41 P Rear 100/90x17", 55 P**	Front 2.75x18 4PR Rear 3.00x18 6PR	Front 2.75x18 4PR Rear 3.00x18 6PR	Front 2.75x18 4PR Rear 3.00x18 6PR	F-80/100, 17 R-100/90, 17	• Excellent road grip.
Wheel Base	**1325 mm**	1256 mm	1265 mm	1265 mm	1271 mm	Largest wheel base in its class of bikes. Excellent Stability
Ground Clearance	**170 mm**	160 mm	150 mm	173 mm	173 mm	• Suitable for Indian driving condition.
Brakes	**Front 240 mm Disc Rear 130 mm Drum**	Front 130 mm Rear110 mm	Front 130 mm Drum disc brake opt. Rear130 mm Drum	Front 130 mm Drum disc brake opt. Rear130 mm Drum	Front 130 mm Drum disc brake opt. (210 mm) Rear130 mm Drum	• Excellent breaking efficiency.

Annex - 5

Pre-Delivery Inspection Checklist

Following is the checklist for carrying out PDI of **"Bajaj Pulsar 135 LS"** motorcycle. This checklist is to understand various check points those are to be checked / inspected before delivery of the new vehicle.

Whether BAL Service Executive carries out sample PDI or Dealer staff does, each vehicle should be checked as per the points given below. This ensures trouble free vehicle delivery to the customer

Frame No.	M	D	2	J	D	Z	Z	S	C								
Engine No.	J	E															

Dealer's Name _____ **Dealer's Code** _____

Date of PDI _____ **PDI done by** _____

Please insure that following checks are carried out during PDI before delivery of vehicle.

To Check	Check For	☐ if OK or ☐ if NOT OK	Observations / Remarks
ENGINE			
Engine Oil- 'Bajaj DTS-i 10000'	Oil level OK / Top up if required	☐	
	Oil leakage if any - Specify source of oil leakage	☐	
Idling RPM (Warm up)	Check / Adjust if required (1400 ± 100 rpm)	☐	
Kick Operation	Smooth operation, Tightness of kick boss bolt	☐	
Fasteners (Check torque)	Magneto, Clutch & Oil filter cover bolts - 0.9 ~ 1. Kgm	☐	
	Side Stand bracket - 1.8 ~ 2.2 Kgm	☐	
	Engine foundation nut / bolts - M 10 : 3.2 Kgm, M 8 : 2.2 Kgm)	☐	
	Cap oil strainer - 0.9 ~ 1.1 Kgm	☐	
	Kick boss bolt - 2.0 ~ 2.2 Kgm	☐	
	Silencer bracket bolts - 3.5 Kgm, Mouth nuts - 2.0 ~ 2.2 Kgm	☐	
	Cylinder head cover bolts - 0.9 ~ 1.1 Kgm	☐	
FUEL SYSTEM			
Fuel Tank / Pipes	No leakage / Correct fitment	☐	
Carburettor	No leakage / Correct fitment	☐	
Fuel Cock	Smooth operation	☐	
		☐	
Tyre Pressure	Front : 1.75 Kg / Cm^2 (25.0 PSI)	☐	
	Rear (Solo) : 2.00 Kg / Cm^2 (28 PSI)	☐	
	Rear (with Pillion) : 2.25 Kg / Cm^2 (32.0 PSI)	☐	
CONTROLS			
Brakes	Front brake lever free play - 2 ~ 3 mm	☐	
	Rear brake pedal free play - 20 ~ 25 mm	☐	
Throttle	Grip free play - 2 ~ 3 mm. Smooth operation	☐	
Clutch	Smooth operation, No juddering, Free play - 2 ~ 3 mm	☐	
Clutch Cable	Ensure correct routing	☐	
Drive Chain	Slackness standard - 25 ~ 30 mm, Service Limit - 35 ~ 40 mm	☐	
SUSPENSION			
Front Fork	No leakage. Smooth working	☐	

To Check	Check For	✓ if OK or ✗ if NOT OK	Observations / Remarks
Rear Shock Absorber	Spring adjuster notch position : 2nd notch (Standard)		
Steering	Smooth operation (No play / Sticky movement)	☐	
Lock Operation	Steering cum Ignition, Seat, LH side cover lock	☐	
Fasteners (Check torque)	Front axle nut - 4.5 ~ 5.5 Kgm	☐	
	Rear axle nut - 8.0 ~ 10.0 Kgm	☐	
	Front fender bolts - 2.0 ~ 2.2 Kgm	☐	
	Fork pipe top bolts - 3.0 ~ 3.2 Kgm	☐	
	Fork under bracket bolts - 2.5 ~ 3.0 Kgm	☐	
	Holder handle upper bolts (4 Nos) - 2.0 ~ 2.2 Kgm	☐	
	Rear shock upper nut - 3.0 ~ 3.2 Kgm	☐	
	Swing arm - 4.5 ~ 5.5 Kgm	☐	
	Rear shock mounting lower bolt - 2.8 ~ 3.2 Kgm	☐	
	Steering stem head nut - 5.0 Kgm		
ELECTRICAL		☐	
Battery	Charge status (12.5 V open circuit terminal voltage)	☐	
	Tightness of battery terminals / cables	☐	
	Position of fuse box	☐	
All Bulbs Working	Head light, Pilot lamps - 2, LED tail / stop, Side indicators, Speedo bulb,	☐	
	No. plate lamp, Turn pilot, High beam, Battery & Neutral indicator	☐	
Switch Operation	RH & LH control switch, Ignition switch & Brake switch (Front & Rear)	☐	
Starter Motor	Proper working / Engagement		
TEST DRIVE		☐	
Starting	Cold start & Warm start	☐	
	Idling speed (Warm condition) (1400± 100 rpm)	☐	
Drive ability	Throttle response	☐	
	Brakes - Front & Rear	☐	
	Speedometer, Odometer & Trip meter	☐	
CO % Check	Co should be 2± 0.5 % in engine warm condition at idling RPM		
Cleaning	Wash & Clean vehicle properly	☐	

Annex - 6

Key Maintenance Skill Tips

Various inputs on PDI, Scheduled Maintenance, Periodic Service & other repairs etc. are being given during training. And such information has been incorporated in the training notes as well.
Further to emphasize on how to achieve consistent performance, we give below key parameters those are essential to follow during regular periodic services / scheduled maintenance.

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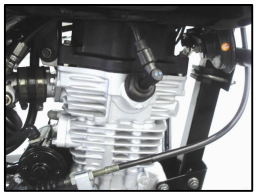
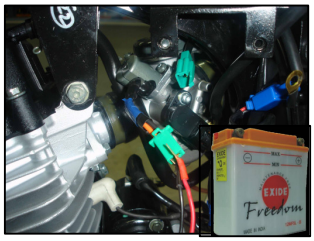
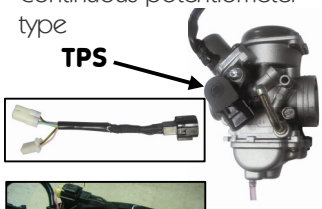
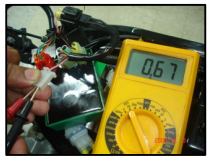
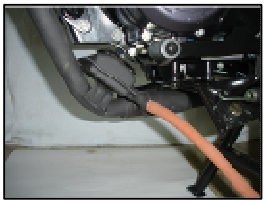
What to Check /Inspect?	How to Check / Inspect?	Why to Check / Inspect?
Proper functioning of both the **Spark Plugs** **LH Side Plug**  **RH Side Plug** During PDI & every Service	• Remove R.H. side Spark plug cap • Crank the engine by Self / Kick. • Engine should start & run smoothly. • This confirms proper functioning of L.H. side spark plug. • Confirm working of R.H. side Spark plug in similar way by removing L.H. side Spark plug cap.	• This engine does not have Primary & Secondary spark plugs. Here both start functioning simultaneously from the moment crankshaft starts cranking. • If one plug fails, it will not give symptom of starting trouble etc. rather engine will run smoothly. But performance will get affected. • Hence, it is essential to check functioning of both Spark Plugs. • This ensures optimum & faster burning of air-fuel mixture. So consistent power delivery & fuel economy.
Functioning of **Auto Choke**  ➡ During PDI & every Service	• Apply external 12 V DC supply to solenoid operated Auto choke coupler terminals. • Check for 'Click' noise on immediate connection. • On holding say for 30 seconds feel for warm solenoid brass cap. • This ensures proper functioning of Auto Choke. • It is recommended to check at every 10000 Kms. Or whenever poor mileage/performance noticed.	• If Auto Choke is not functioning properly, it will lead to starting trouble during cold • This Choke supplies rich mixture till engine reaches to 30^0 C temperature. Thus ensures no flat spot & smooth running even in cold condition. . • This check is required to ensure its proper functioning
Functioning **of Thermal Sensor** ➡ During PDI & every Service	• Check thermal sensor resistance at room temp (25^0-35^0 C) • Resistance value will be different at different temperature ranging from 7K to 10.5K Ohms. • Checking frequency - during PDI & It is recommended to check at every 10000 Kms. Or whenever poor mileage/performance noticed.	Thermal Sensor is one of the key components in the engine performance. • It gives signal to Auto Choke for its operating at cold as well as high temperature. • Also it is connected to CDI unit which delivers different ignition maps at different engine temperature •Hence, for optimum performance of engine accurate functioning of Thermal Sensor is a must

What to Check /Inspect?	How to Check / Inspect?	Why to Check / Inspect?
Functioning of TPS – Continuous potentiometer type TPS   ➡ During every Service	**Check TPS as per SOP** • Input voltage between Gray/ White & Black / Yellow wire must be + 5V ± 10% • Ensure idling RPM of engine is 1400 ± 100 • Ensure accelerator free play is 2 ~ 3mm • Check Voltage between pink & black / yellow wire with the help of Pigtail. Condition (In ignition switch & Kill switch ON condition) – Std. Value Zero Accelerator – 0.7 V ± 10% 100% Accelerator – 3.6 V ± 10%	• TPS functioning is essential for purposeful functioning of TRICS. • Right functioning of TRICS is crucial for both low & high engine rpm & different load conditions on the engine. • Ensures better engine performance & knock free engine running.
CO% checking & setting  ➡ During every Service	Check CO% during every service. Refer SOP for CO checking & setting • Ensure readiness of the CO gas analyzer as recommended • Ensure readiness of the vehicle i.e. warm condition etc. (60^0 C) • Use specified silicon rubber tube • Take CO reading at idling rpm • CO% should be between 1.5 to 2.5% • Adjust Airscrew if required to obtain the specified CO%. • If not able to achieve the specified CO%, rectify the problem • Checking frequency - at every 120 days OR 5000 Km	• Specified CO% is the key performance indicator in all our motorcycles. • Hence, to obtain optimum performance & best fuel economy, checking & setting of CO% is utmost essential
Engine Oil grade & qty. 	• Recommended engine oil grade is **'Bajaj DTS-i 10000'** a high performance engine oil developed by Bajaj auto, specially formulated for vehicle with DTS-I engines.	• For longer drained period i.e. 10,000 Kms interval. • For enhanced life of engine components.
RR Grease ➡ As per schedule	Following lubricating points on the frame are to be lubricated with 'Servo Gem RR-3' grease only • Front & Rear Axle • Swing Arm bushes • Steering Cones & balls • Brake Pedal pivot points	• Better quality of grease • For increased life of frame components
Battery ➡ During PDI & Service	**<u>During PDI:</u>** 1. Confirm voltage of 12.5±0.3 V; 2. Boost charge if required; 3. Fit on veh. on FIFO basis **<u>During Service:</u>** 1. Confirm voltage of 12.5±0.3; 2. Check Sp. Gravity of all cells; 3. Confirm electrolyte level; 4. Apply Petroleum Jelly to terminals	All for increased life of Battery

Annex - 7

'BAJAJ PULSAR 135 LS' - Exclusive Parts List

Sr No.	ITEM CODE	DESCRIPTION	QTY	MRP
1	JN131806	CALIPER ASY BRAKE FR	1	1065.00
2	LDB00002	WASHER PLAIN DIA. 32X20.2X3	1	1.59
3	JD151026	FORK PIPE SPINNING	2	*
4	JD402601	TFR TANK UNIT	1	159.00
5	JD171038	SEAT TAPE	1	12.00
6	JD171600	CAP FUEL TANK	1	381.00
7	JD171030	FUEL COCK ASSY	1	122.00
8	JD171800	FUEL PIPE	1	25.50
9	JD131002	WHEEL ALLOY 1.4X17-DISC-134PCD	1	1891.00
10	JD131810	BRAKE DISC 5-MTG 134PCD	1	883.00
11	JD131811	HEXAGON SOCKET HEAD BOLT-M8	5	12.60
12	JD131808	HOSE ASSY	1	331.00
13	JD131601	LEVER BRAKE	1	119.00
14	LDB00001	WASHER PLAIN DIA.32X15.2X3	1	7.50
15	JD111001	FRAME ASSEMBLY (WITHOUT STEERING RACES/CONES)	1	*
16	JB111033	PLUG REAR PIPE (FRAME)	2	1.77
17	JD181401	BRACE FENDER	1	84.00
18	JD131809	HOSE CLAMP	1	10.50
19	JD181402	FLAP FRONT FENDER	1	27.50
20	JD181404	HUGGER	1	211.00
21	JD181405	SLEEVE HUUGER MTG FRONT	2	4.60
22	JD181406	MUD FLAP FENDER REAR	1	39.00
23	JD113800	BRACKET REAR NUMBER PLATE	1	20.30
24	JD113801	BRACKET REAR BLINKER MTG	1	218.00
25	JD113802	BRACKET REFLECTOR MTG	1	14.10
26	JD401007	REAR NUMBER PLATE LAMP	1	85.50
27	JD113201	SIDE STND MTG BKT	1	125.00
28	JD113002	HOLDER STEP LH	1	478.00
29	JD111012	BKT SIDE COVER LOCK	1	11.60
30	JD113003	HOLDER STEP RH	1	521.00
31	JD113200	SIDE STAND	1	61.50
32	JE501000	ENGINE ASSEMBLY	1	*
33	JD113400	BRACKET ENGINE HANGER	2	13.40
34	JD111011	CLIP NUT FOR SIDE COVER	1	9.70
35	JD122003	SHOCK ABSORBER REAR	2	780.00
36	JD122004	ROD TORQUE	1	*
37	JD151000	FRONT FORK ASSY DISC		3506.00
38	JD151029	HOLDER FORK UNDER	1	*
39	JD232801	NUMBER PLATE MTG BKT	1	*
40	JD151015	HOLDER FORK UPPER	1	*
41	JD151023	BRACKET FRONT BLINKER MTG LH	1	13.80
42	JD151024	BRACKET FRONT BLINKER MTG RH	1	13.80
43	LAC00009	BOLT UPPER BRACKET	2	8.90
44	JD232802	FRONT NUMBER PLATE MTG BKT	1	46.30
45	59040006	NUT FORK	1	27.30
46	JD151016	HANDLE HOLDER LH	1	*

47	JD151034	HANDLE BAR TUBE ASSLY LH	1	158.00
48	JD151032	PLUG HANDLE HOLDER	1	4.02
49	JD151017	HOLDER HANDLE RH	1	*
50	JD151035	HANDLE BAR TUBE ASSLY LH	1	158.00
51	JF401400	CONTROL SWITCH LH	1	494.00
52	JF401401	CONTROL SWITCH RH(SS)	1	520.00
53	JD161200	CABLE ACCELERATOR	1	83.00
54	JD161201	CLUTCH CABLE	1	105.00
55	JD181221	BRACKET SPEEDO COVER	1	12.00
56	JD151006	LAMP SHADE ASSY	1	238.00
57	JD151037	BKT HEADLAMP MTG LH	1	6.40
58	JD151038	BKT HEADLAMP MTG RH	1	6.40
59	JD402401	DIGITAL SPEEDOMETER- SPRINT	1	1934.00
60	JD181211	SPEEDO FLAP	1	119.00
61	JD181228	COVER HARNESS LH	1	12.50
62	JD181229	COVER HARNESS RH	1	12.50
63	JD161001	BRAKE PEDAL ASSY	1	188.00
64	JD161003	ROD BRAKE	1	38.60
65	JD161002	SPRING BRAKE PEDAL	1	9.90
66	JD401008	LED TAIL LAMP ASSEMBLY	1	817.00
67	JD161004	SPRING BRAKE SWITCH	1	4.80
68	JD402214	HARNESS WIRING(FRONT)	1	550.00
69	JD402202	HARNESS WIRING(REAR)	1	894.00
70	JD191000	SEAT ASSY COMP FRONT	1	583.00
71	JD191007	GROMMET RIDER SEAT BASE MTG	1	*
72	JD191008	COLLAR RIDER SEAT BASE MTG	1	5.30
73	JD191003	SEAT ASSY COMP REAR	1	413.00
74	JD191006	DAMPER ROUND	2	2.99
75	JD231201	LEG GUARD	1	214.00
76	JD231202	SARI GUARD	1	254.00
77	JD231402	GRAB HANDLE LH WITH FOAM	1	172.00
78	JD231403	GRAB HANDLE RH WITH FOAM	1	172.00
79	JD231600	MIRROR ASSLY LH	1	102.00
80	JD231601	MIRROR ASSLY RH	1	102.00
81	JD561411	ASSEMBLY LEVER CHANGE ARM	1	62.00
82	JD561413	TIE ROD	1	15.60
83	JD561414	ASSEMBLY LEVER COMPLETE CHANGE	1	108.00
84	JD561416	WASHER - NYLON (Φ6.5XΦ15X2.0)	2	3.13
85	JD561417	BOOT - CHANGE ARM	1	8.40
86	JD561418	BOOT - CHANGE LEVER	1	8.40
87	JG401600	HORN WITH STAY	2	138.00
88	JD181003	FENDER REAR FRONT ASSLY	1	164.00
89	JD181000	FLAP LH	1	9.60
90	JD181001	FLAP RH	1	9.60
91	JD181002	FOAM STRIP	1	*
92	JD151036	CUP WASHER	2	17.60
93	JD113013	STEP PILLION RH	1	107.00
94	JD113014	BALL & SPRING ASSY	1	49.40
95	JD113007	PLATE LOCK PILLION STEP	1	18.50
96	JD113015	STEP PILLION LH	1	105.00
97	JD113019	PIN PILLION STEP	1	10.70
98	JD113009	RIDER STEP RH	1	*
99	JD113005	RIDER STEP LH	1	*
100	JD401024	HEAD LAMP ASSLY WITHOUT BULB	1	780.00
101	JD401025	WIRING HARNESS HEADLAMP	1	120.00

102	JD122000	SWING ARM COMPLETE	1	969.00
103	52JD0025	CHAIN CASE KIT	1	430.00
104	36JE0009	SIDE COVER GROMMET KIT	1	*
105	JD151003	FRONT FORK PIPE LH	1	*
106	JD151004	FRONT FORK PIPE RH	1	*
107	JD151039	CYLINDER COMPLETE FORK	1	*
108	JD231203	LADIES FOOT REST	1	212.00
109	36JE0004	SET DRIVE AND DRIVEN	1	*
110	36JE0007	CHAIN SPROCKET KIT	1	723.00
111	52JE0012	CRANKCASE CLUTCH SIDE	1	*
112	52JE0013	CRANKCASE MAGNETO SIDE	1	*
113	52JE0014	CYLINDER HEAD COMPLETE	1	*
114	36JE0002	PISTON RING SET	1	179.00
115	52JE0018	CLUTCH COVER	1	*
116	52JE0017	MAGNETO COVER	1	*
117	52JE0016	BLOCK PISTON ASSLY	1	1238.00
118	JE351002	ROTOR ASSLY	1	*
119	JD591056	SILENCER ASSLY WITHOUT SHIELD	1	*
120	36JE0001	VALVE REPAIR KIT	1	*
121	36JE0003	CHAIN GUIDE KIT	1	*
122	JE551403	CENTER CLUTCH	1	*
123	JE551404	SPRING CLUTCH	4	*
124	36JE0005	CLUTCH PLATE KIT	1	581.00
125	JV541208	SHAFT CLUTCH RELEASE ASSY	1	*
126	JV541207	CAP TDC FINDER	1	*
127	JV541209	BRACKET CLUTCH CABLE	1	15.10
128	JV521003	ADJUSTER ASY C'CHAIN	1	183.00
129	JV541007	BOLT FLANGE (CRANKCASES MOUNTING)-M6X1X35L	21	1.65
130	JD76014R	PNTD SEAT COWL ASSY PASS RED	1	*
131	JD76014M	PNTD SEAT COWL ASSY MID BLK	1	*
132	52JD0061	LH SIDE COVER ASSLY- SILVER PAINTED	1	*
133	52JD0062	RH SIDE COVER ASSLY- SILVER PAINTED	1	*
134	52JD0067	WINDSHIELD WITH MASK -- ASSLY FOR SPD	1	*
135	JD73014R	PNTD COWLING LH (JD181208) PASS RED	1	*
136	JD73014M	PNTD COWLING LH (JD181208) MID BLK	1	100.00
137	JD73024R	PNTD COWLING RH (JD181209) PASS RED	1	*
138	JD73024M	PNTD COWLING RH (JD181209) MID BLK	1	100.00
139	JD71014R	FUELTANK PASSION RED WITH DECAL	1	*
140	JD71014M	FUELTANK MID BLK WITH DECAL	1	*
141	JD72024R	PNTD FRONT FENDER WITH FLAP - PASS RED	1	*
142	JD72024M	PNTD FRONT FENDER WITH FLAP - MID BLK	1	*
143	JD74014R	PNTD TANK SPOILER LH PASS RED	1	*
144	JD74014M	PNTD TANK SPOILER LH MID BLK	1	*
145	JD74024R	PNTD TANK SPOILER RH PASS RED	1	*
146	JD74024M	PNTD TANK SPOILER RH MID BLK	1	*
147	JD74034R	PNTD TANK SPOILER CENTRAL PASS RED	1	*
148	JD74034M	PNTD TANK SPOILER CENTRAL MID BLK	1	*
149	JD511004	SLEEVE SPARK PLUG	1	80.00
150	JD511201	VALVE INTAKE	2	96.50
151	JD511202	VALVE EXHAUST	2	135.00
152	JD511207	ROCKER ARM WITH ROLLER	2	285.00
153	JD511209	SHAFT ROCKER ARM (50L)	2	14.10
154	JD511211	CAM SHAFT COMP	1	409.00
155	JD511008	GASKET CYLINDER HEAD	1	51.50
156	JE531000	CRANK SHAFT ASSY.	1	2031.00

157	JE531001	BALL BEARING-22X56X16 SKF	2	208.00
158	JE541008	SPRING - KICK STARTER RETURN	1	9.60
159	JE541206	COVER LH RR COMP.	1	*
160	JE351200	CDI ASSEMBLY	1	864.00
161	JE541210	DAMPER	1	68.00
162	JE541212	DECAL MAGNETO COVER	1	31.80
163	JE551401	ROD PUSH	1	11.50
164	JE541209	DAMPER	1	47.20
165	JE541208	CAP FILTER	1	44.70
166	JE541211	DECAL CLUTCH COVER	1	26.30
167	JE551400	CLUTCH ASSEMBLY COMP FCC	1	1414.00
168	JD561001	DRUM COMP GEAR SHIFT	1	211.00
169	JE621200	LEVER ASSLY KICK	1	384.00
170	JE581400	INTAKE MANIFOLD BS26	1	58.50
171	JE581401	SLEEVE CARBURETOR BS26	1	16.90
172	JE581200	CARBURETTOR ASSY.BS26	1	2208.00
173	JD581005	AIR FILTER ASSLY.(BS26)	1	476.00
174	JD581007	COVER AIR FILTER	1	38.60
175	JD581001	AIR INTAKE DUCT	1	52.50
176	JE581000	CONNECTING TUBE (BS26)	1	49.50
177	JD233000	TANK DECAL PULSAR-BLACK	2	162.00
178	JD233002	SEAT COWL DECAL PULSAR BLACK	2	26.70
179	JD233004	4 VALVE PULSAR BLACK DECAL LH	1	46.80
180	JD233006	4 VALVE PULSAR BLACK DECAL RH	1	46.80
181	JD233001	TANK DECAL PULSAR-RED	2	162.00
182	JD233003	SEAT COWL DECAL PULSAR RED	2	26.70
183	JD233005	4 VALVE PULSAR RED DECAL LH	1	46.80
184	JD233007	4 VALVE PULSAR RED DECAL RH	1	46.80

NOTE: - Prices for * marked items will be updated in the system shortly.

Action Matrix:

<table>
<tr><th>Sr.No</th><th>Key Information</th><th>Works Manager/ DSE</th><th>PDI In charge</th><th>Sales In charge</th><th>Service Advisor</th><th>Floor In charge</th></tr>
<tr><td>1</td><td>Salient Features</td><td rowspan="3">Share with Sales/Service/PDI Team

Organize sharing with Secondary Channels through C.A. Manager</td><td rowspan="3">Understand along with PDI team</td><td rowspan="3">Understand thoroughly along with Sales team to enable the team to deliver to customers with great confidence</td><td colspan="2" rowspan="3">Understand thoroughly along with workshop team

Create product confidence in them</td></tr>
<tr><td>2</td><td>Technical Specifications</td></tr>
<tr><td>3</td><td>Frequently Asked Questions</td></tr>
<tr><td>4</td><td>Comparison with competition vehicles</td><td rowspan="4">Share with Service/PDI Team</td><td rowspan="2">Understand & implement</td><td></td><td colspan="2" rowspan="4">Understand & get updated</td></tr>
<tr><td>5</td><td>PDI Checklist</td><td></td></tr>
<tr><td>6</td><td>Maintenance skill tips</td><td></td><td></td></tr>
<tr><td>7</td><td>Exclusive parts list</td><td></td><td></td></tr>
<tr><td colspan="2">Date of Actions:</td><td></td><td></td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Initials of concern official</td><td></td><td></td><td></td><td colspan="2"></td></tr>
</table>