

# Presenting The 610 SK

**POWERFUL PERFORMANCE IN EXTREME CONDITIONS**

**THE BOSS OF OFF-ROADING IS NOW  
EVEN MORE POWERFUL/ RUGGED**

- Same Assurance of Reliability & Quality of BS4
- More capability
- Better Drivability
- More Profitable



**SK 407 is now 610 SK**

**RAR of 4.857:1**

**Highest Gradeability**

**40%+**

**Shortest turning radius**

**of 5.5m**

**Closed pitch load body**

**Fully Built Tippers**

**Available**

**Strongest & reinforced  
ladder type 5mm thick  
chassis frame**

**Uptime from Day 1 of  
operations**



# TATA 610 SK- Power of 6 in BS6



## 1. Power of Business Profit

- Better Deck lengths- Available in 3CuM capacity, unlimited capability
- Improved TCO/Fuel Efficiency- 5% better Fuel Efficiency over BS4, 4% better TCO over BS4 with only 3 additional trips per month
- Increased Service Interval
  - Service Intervals upgraded: 40,000 KMs for 4SPCR Engines
  - Hub greasing, coolant Service interval now at 1,20,000Kms
- Faster Turnaround means 1 – 2 More round Trips per month easily
  - Power increased by 18%, max Torque increased by 20% , low end torque increased by 26%
  - Better drivability with cabin feature improvements
- Optimised Payload
  - GVW node of 6.25 T with stronger aggregates with better capabilities due to Banjo Rear axle and new 5mm thick HSS 800 chassis

## 2. Power of Vehicle Performance

- Higher Power & Torque-
  - 4SPCR Engine: Max power improvement from 85 PS to 100 PS (18% more), Max Torque improvement from 250 Nm to 300 Nm (20% more)
  - Variable Geometry Turbocharger for better power management
- Improved Low End Torque-
  - Low End torque Increased to 290 Nm (26 % increase)
  - Engine response is now immediate in start stop conditions
- Better Drivability with flatter torque over wider rpm band
  - Improved Flat Torque Range leads to Better Mileage & lesser gear shifting and easy overtaking
- Gradeability increased to 40%+ (at 1<sup>st</sup> Gear) with Best in class restart-ability
- Improved Braking Performance with H2LS Brakes with Brake Boosters
- Robust Performance:
  - Strongest chassis with HSS 800 Steel with high tensile strength, bolted design for increased modularity. Long member thickness is increased to 5mm from 4mm
  - Banjo Type Rear Axle - More Load carrying capacity, lesser prone to leakage.
  - Serrated Coupling flange at propeller shaft for better Reliability and Maintenance.





# TATA 610 SK- Power of 6 in BS6

**TATA MOTORS**  
Connecting Aspirations

## 3. Power of Driving Comfort

- New Seats with better design -Melba Fabric for Seats for better comfort in both summer and winter, Seat Adjustment in XZ Direction,
- Improved pedal positions & Effort
  - - Improved Ergonomic pedal positions to reduce fatigue
  - Low Hysteresis clutch along with clutch booster to Lower Pedal Effort by 40%
- Improved Gear shift Ergonomics and Quality
  - Lower Gear Shift with optimized Gear Shift travel
  - Effort reduced by 30% over BS4
- Better Suspension- Suspension- increased thickness of Leaf springs with Hydraulic Double acting Shock Absorbers
- Power Steering as standard- New Steering Wheel with Power Steering with reduced effort as a standard fitment
- Better overall Ergonomics -Lower NVH with improved engine mount Combined with Parabolic suspension



## 4. Power of Convenience & Connectivity

- Instrument Cluster- New Multi-Function Ergonomic Instrument Cluster with inbuilt Gear Shift Advisor (GSA), Tell Tale Symbol
- Gradeability increased to 40%+ with Best in class restart-ability
- Infotainment- High Quality Music System with Blaupunkt Speakers and High Speed USB Mobile Charger
- Illuminated Facia Switches for ease of detection:
  - Illuminated key hole helpful for night operations
  - Illuminated dashboards help to alert and draw attention
- Reverse Parking assistance- helps the driver sense when objects are in the vehicle's "blind spot"
- Best in class Cabin Storage- More space inside the cabin



# TATA 610 SK- Power of 6 in BS6



## 5. Power of Value

- Superior Service Network- 1 Service Station for every 50 Kms, 24 hours Support, 1500 Channel Partners, 29 State Service office, 250+ On Site Engineers, 262 Mobile Workshops, 531 Container Workshops
- 3x3 warranty (3 Years 300000Km) – 3 Saal, Aapka Khayal
- Diagnostics to ensure higher uptime- On Board Diagnostic system helps provide proactive system alerts
- TATA Motors Genuine Oil- Lowest MRP Oil available in the market to reduce customers operating cost
- Reliable Proven Engines -The DNA of BS4 Engine is carried to the BS6 Engine so that the same reliability and Mileage Superiority is achieved
- Higher Resale Value for TML Trucks-1.5 lakh BS4 ILCV vehicles on road- will definitely increase resale in coming years, Better Aggregates make longer life of parts, Tata OK and Tata Prolife support



## 6. Power of Safety & Security

- Safest Cabin & vehicle with Robust Frame & Aggregates-
  - SAFETY ENHANCED ALL Steel Cabins with more solid built quality, Banjo Type Rear Axle for better Load carrying capacity, Serrated Coupling flange propeller shaft for better Reliability and Maintenance
  - Strongest chassis with HSS 800 steel
- Best in Class Braking Performance with H2LS Brakes Power Steering & Reverse Parking as a standard fitment
- Tata Samrath-
  - Swasthya (Wellness program),
  - Sampatti (Finance program)
  - Siksha (Education program)
  - Surakshit (driver on wheel insurance)
- Tata Sampurna Seva 2.0-

Tata Alert	Tata Motors Insurance
Tata Delight	Tata Prolife
TATA Kavach	Tata Genuine Parts
Tata Zippy	Tata OK
TATA Suraksha	Tata Connectivity



# The 4 SP BS-6 Engine



**Only Engine in India**  
that has seen the evolution of CV Industry growing through various phases of Emission Regulations and successfully Migrating to each phase

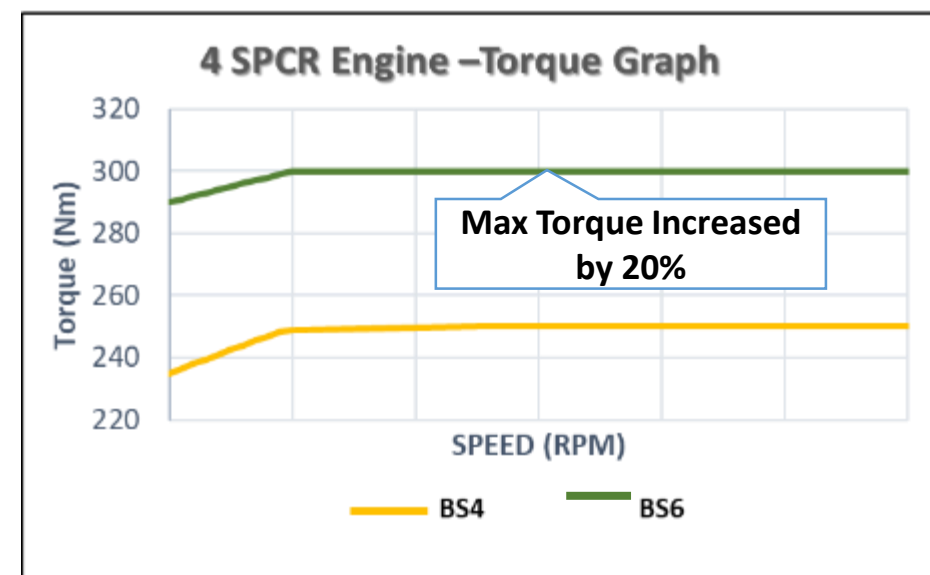
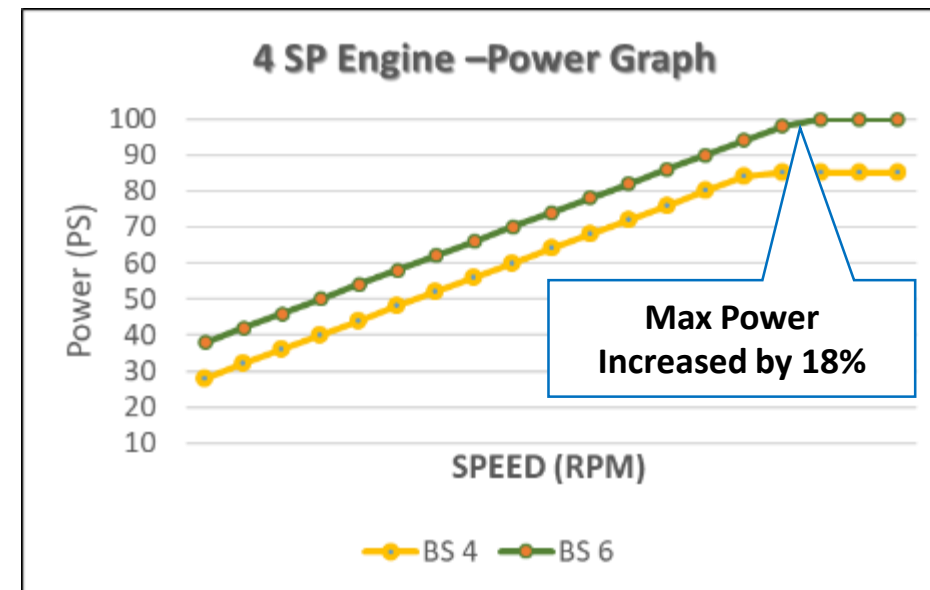
- Makes it highly adaptable to any environment
- Easy Spares availability
- Easy on Maintenance
- Makes it Most Fuel Efficient



# The 4 SP BS-6 Engine

## Engine Comparisons: 4SP BS-4 v/s 4SP BS-6

Parameter	4SP BS-4	4SP BS-6	Advantage
Bore x Stroke (mm)	97 x 100	97 x 100	Square Pattern – More efficient Engine with higher output and better Mileage
Max Power	85 PS @ 2800 rpm	100 PS @ 2800 rpm	Max Power increased by 18% Better Turnaround
Max Torque	250 Nm @ 1400 – 2400 rpm	300 Nm @ 1200 – 2200 rpm	Max Torque Increased by 20% More Pulling Power
Low End Torque	235 Nm @ 1000 rpm	290 Nm @ 1000 rpm	Low End torque Increased by 26% Better Pick up at signals, gradients



**Optimal Power and Torque leading to better drivability and load carrying capacity**

**Longer flat torque leads to better restart ability, Gradeability and Fuel economy**

**5% better fuel economy over BS4**

**Enhanced service interval (20000 KM to 40000 KM)**



# 610 SK- Technical Specifications



**TATA MOTORS**  
Connecting Aspirations

## POWER TRAIN

Engine Type	4SPCR
Displacement	2956cc
Max Power (in kW)	100 PS @2800 r/min
Max Torque (in Nm)	300 Nm @ 1200 -2200 RPM
Clutch	Single plate dry friction type- 280 mm dia
Transmission	G550, 5 Speed, Manual Synchromesh (5F, 1R) with PTO Fitted CAB CHASSIS

## FUEL SYSTEM

Fuel Injection system	M/s Delphi (suitable upto 2000 bar)
Fuel tank capacity (in litres)	60L

## ELECTRICALS

Battery	12V, 100 Ah capacity
Alternator	75 Amps

## SUSPENSION AND TYRES

Front Suspension	Semi elliptical multi leaf spring, Hydraulic double acting telescopic shock absorbers
Rear Suspension	Semi elliptical multi leaf spring
No of tyres	Front 2,Rear 4 , Spare 1
Front , Rear	7.50 -16 16PR

## BRAKES

Service Brake	Vacum assisted; Hydraulic two leading slide shoe; Auto Slack Adjuster
Parking Brake	Transmission mounted parking drum

## STEERING AND FRAMES

Steering System	Power Steering with new Steering Wheel
Frame	Ladder type frame with riveted/bolted cross members.

**MAX GRADEABILITY: 40%+ ( on 1<sup>st</sup> Gear)**

# 610 SK- Product Variants

Product	610 SK	
Gross vehicle weight (in kg)	6250 (6.25 Ton)	
Capacity	3 CuM Tipper	
Tyre	7.50 -16 16PR (6 Tyres)	
Variant	CBC	Tipper Body
Wheel base (in mm)	3305	3305
Overall Length (in mm)	4960	5390
Overall Height (in mm)	2310	2350
Overall Width (in mm)	2055	2055
Load body Length (in mm )	NA	3120 (10.3 Ft)
Load body Width (in mm )	NA	1860(6.10 Ft)
Load body Height (in mm )	NA	525 (1.72 Ft)
Minimum Ground Clearance (in mm )	213	
Seating Capacity	Driver + 2	
Warranty	3 years or 300000 km, Whichever is earlier*	

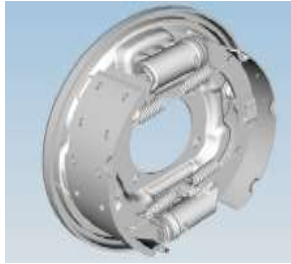
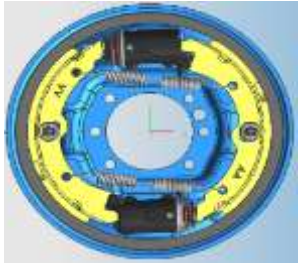


Maintenance Activity		Engine
		4SPCR
Engine oil	Service Interval (Km)	40,000
T/M oil		120,000
Differential oil		120,000
Power steering oil		120,000
Coolant		240,000
Clutch oil		120,000
Hub grease Front		120,000
Hub grease Rear		120,000



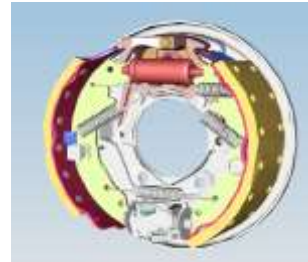
# Improved Product Package

H2LS , Hydraulic 2 Leading shoes



Both brake shoes are Leading always (two double acting wheel cylinders). Separate Transmission parking brake arrangement.

Duo Servo brake



Primary and secondary shoes with single cylinder and duo servo arrangement. Parking brake arrangement at rear brakes.

BS4



=



BS6



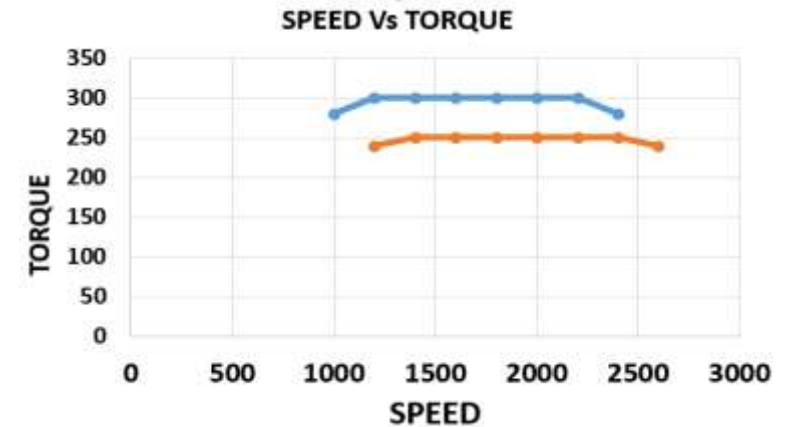
The DNA of BS4 Engine is carried to the BS6 Engine so that the same reliability and Mileage Superiority is achieved

Brake Sensitivity is better compared to Duo- Servo brake; resulting in reduction in brake torque variation, hence improving upon issues of vehicle pulling & stability.

It has Progressive feel.

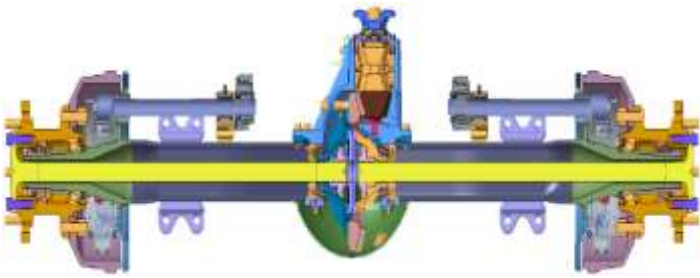
Better life of adjuster than in the current arrangement due to better Adjustment mechanism in H2LS brakes (as it is integrated inside the Wheel cylinder).

Brake adjustment procedure is easier than existing arrangement.



Improved Drivability because of improved Low end torque and Flat Torque Range-Better Mileage

# Improved Product Package



**Banjo Type Rear Axle**  
More Load carrying capacity, lesser prone to leakage



Long member thickness is maintained at 5mm as standard  
Single piece frame for Engine mountings updated inline with BS 6



**Light Weight Loadbody with increased strength**



**Urea Tank- 18 Lt**



**SAFETY ENHANCED** with more solid built quality on SFC Cabin



Separate Vacuum pump on engine for efficient Braking, BS4 was alternator mounted



E-Viscous fan to improve the performance of the vehicle



Serrated Coupling flange propeller shaft for better Reliability, Maintenance & to increase Power Transmission



Transmission / Steering oil change / Hub Greasing interval is improved from 80k kms to 120000 kms



# Improved Drivers' Package



**Brakes**  
H2LS Brakes Across the Hydraulic Brake Range with Brake Boosters



**Lower Pedal Effort on Clutch**  
Low Hysteresis clutch along with high size clutch booster  
Reduced effort by 40% over BS4



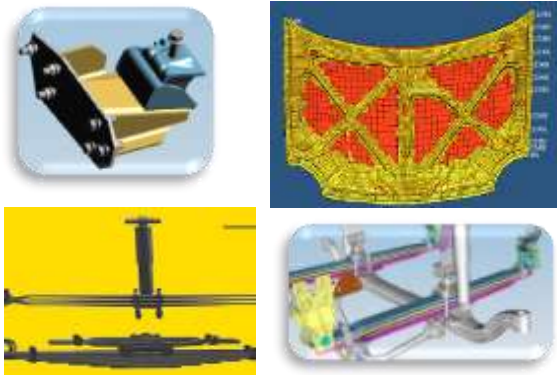
**Lower Gear Shift Effort with optimized Gear Shift travel**  
Effort reduced by 30% over BS4



**Power Steering with reduced effort**  
New Steering Wheel and combination Switch



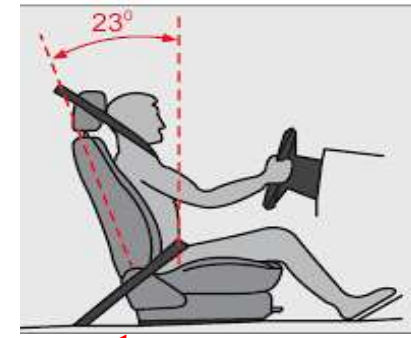
**ABC Pedals**  
Improved Ergonomic pedal positions to reduce fatigue



**Lower NVH with improved engine mount & increased thickness of Leaf springs with Hydraulic Double acting Shock Absorbers**



**Seat Fabric**  
Melba Fabric for Seats for better comfort both in summer and winter



**Seat Adjustment**  
Seat Adjustment in XZ Direction



**Improved New Combination switch with better reliability**

# 610 SK – Additional Product Package



**Tipper Grade bility  
Improvement (> 40%)**



**Sealed Wiring Harness  
connectors**



**New 120A alternator**



**Electric switch for  
tipping**



# 610 SK – Gradeability and RAR

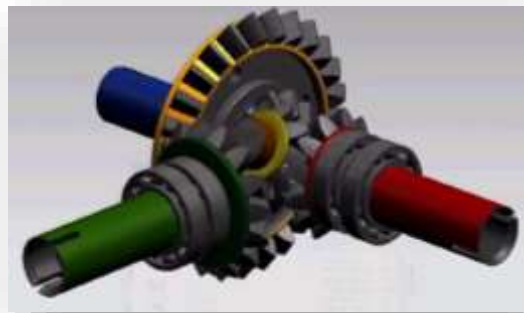
In BS4

36.4



**GRADEABILITY**

4.57:1 (32/7)



**REAR AXLE RATIO**

In BS6

40+



**NEW GRADEABILITY**

4.857:1 (34/7)



**NEW REAR AXLE RATIO**

# 610 SK – Tipper Body Features

- Extra Strong Body Which is built to Last
- **50%** increase in thickness of lower deck then normal tipper for heavy duty usage.
- **33.3%** increase in thickness of side panels to bear Rigid Loading conditions



## EXTRA STRONG AND RUGGED BODY

Front panel material changed from 3 mm FE410 to 4 mm ST 52.3

Side panels material changed from 3 mm FE410 to 4 mm ST 52.3

Floor panels material changed from 4 mm FE410 to 6 mm BSK 46

Tail gate panel material changed from 3 mm FE410 to 4 mm ST 52.3



# Improved Connectivity



**Internal Connectivity – High Quality Music System with Blaupunkt Speakers and High Speed USB Mobile Charger**



**New Multi-Function Ergonomic Instrument Cluster**

Parameter	Tell Tale Symbol	Colour
Urea low level indicator		Amber
SCR system Fault		Amber
DPF regeneration Req		Amber

**Tell Tale Symbol on instrument cluster**



**Gear Shift Advisor in Instrument Cluster**

# Features of Instrument Cluster



Tell-Tale	Description
	Turn Left
	Neutral
	Front & Rear Fog Lamp
	Low oil Pressure
	Stop Engine ( Critical to Engine)
	MIL (Malfunction Indication lamp) (Emission)
	Tilt Cab lock- Not activated for ILCV
	Battery Charging
	Check Engine Lamp



Most Critical

Tell-Tale	Description
	Turn Right
	Check Engine
	HEST (High Engine Exhaust Temp)
	Gear Up Shift
	Gear Down Shift
	Parking Brake
	Seat Belt
	High Beam
	Power take off



**TATA MOTORS**  
Connecting Aspirations

TPMS

ODO ENG  

000000.0 Hrs km

SERVICE TRIP A B DTE 00000.0 Hrs km

AFE 88.8 Lit/Hr km/lkg

LIGHT MEDIUM HEAVY

AT AMT CREEP POWER ECO

AUTO MANUAL CRAWL

BAR DEF F E

15 12 10 8 6 4 2

12 10 8 6 4 2

00 V 10:00 AM PM OAT 00 °C

Note : \* Not activated for ILCV

# Regeneration / other switches Position on Dashboard



## New DASHBOARD CONSOLE with

- MUSIC SYSTEM with high quality Blaupunkt Speakers
- High Speed USB CHARGER
- Manual Regeneration Switch
- Driving Modes Switches don't work

Manual Regeneration On & OFF Switch



# TATA 610 SK BS6– Improved Product Package

**TATA MOTORS**  
Connecting Aspirations

## BS4

Diesel-4SP-  
85 PS @ 2800 rpm  
250NM @1400–  
2400 rpm  
LET- 235 Nm @  
1000 rpm

**GB27 5-Speed  
Gear Box**

**Bolted Plain  
Coupling Flange  
propeller shaft**

**Banjo/Salisbu  
ry Type Rear  
Axle**

**Hydraulic  
Brakes**

**Conventional  
Load body with  
2.66 CuM  
capacity**

**Service  
Interval 20000  
Km multiples**

## BS6

Diesel-4SP-  
100PS @ 2800 rpm  
300 Nm @  
1200 – 2200 rpm  
LET- 290 Nm @  
1000 rpm

**G550  
5-Speed NG  
Gear Box**

**Serrated and  
Bolted Coupling  
Flange propeller  
shaft**

**Banjo Type  
Rear Axle**

**H2LS Brakes**

**NG Load  
Body- 3 CuM  
capacity**

**Service  
Interval –  
Diesel-40000  
Km multiples**

**Gear Shift  
Advisor**

**Tipper Grade  
bility  
Improvement  
(> 40%)**

**VECU – Vehicle  
Controller- smart  
Trucks**

**Cab Chassis  
with PTOP –  
Standard**

**New Improved  
Driver Package**

**Electric  
switch for  
tipping**

• **Better TCO, Drivability, Comfort-Convenience, Durability & Connectivity**

# 610 SK – Tipper Applications



**TATA MOTORS**  
Connecting Aspirations



**Blue metal, Construction material**



**River Stones**



**Sand**



**Laterite**



**Light Stones**



**Small Stones**



**Soil, Earth**



**Bricks**



610 SK – TCO		JUST 3 TRIPS EXTRA WILL ENSURE BETTER TCO THAN BS4				TATA MOTORS Connecting Aspirations	
Parameter		SK 407/31 Tipper BS4	SK 407/31 Tipper BS6	SK 407/31 Tipper BS6	SK 407/31 Tipper BS6	SK 407/31 Tipper BS6	SK 407/31 Tipper BS6
Application		Sand	Sand	Laterite	Blue Metal	Stones	River Stones
Truck Ownership Cost as % of total spend.							
No of Trips per Month		22	25	25	25	25	25
KMs Per Trip		100	100	100	100	100	100
No of Years in operation		4	4	4	4	4	4
Kms in 4 Years		70400	80000	80000	80000	80000	80000
Finance							
Cost of Asset		1367708	1517708	1517708	1517708	1517708	1517708
Finance 7%		382958	424958	424958	424958	424958	424958
Insurance 2.5% of ex shoroom		136771	151771	151771	151771	151771	151771
Total Finance		1887437	2094437	2094437	2094437	2094437	2094437
Financing Cost Per Km		26.81	26.18	26.18	26.18	26.18	26.18
Fuel Efficiency		8.0	8.4	8.4	8.4	8.4	8.4
Fuel Consumed in (Lts)		8800.0	9523.8	9523.8	9523.8	9523.8	9523.8
Fuel Cost / KM		8.75	8.33	8.33	8.33	8.33	8.33
Payload		4.0	4.0	4.0	4.0	4.0	4.0
AMC cost 45 paise per KM							
Maintenance Cost		0.55	0.55	0.55	0.55	0.55	0.55
Driver Cost for 4 Years		720000	720000	720000	720000	720000	720000
Driver Cost /KM		10.23	9.00	9.00	9.00	9.00	9.00
Admin Costs		96000	96000	96000	96000	96000	96000
Admin Costs /KM		1.36	1.20	1.20	1.20	1.20	1.20
Toll Cost /Km		1.50	1.50	1.50	1.50	1.50	1.50
Residual Value		455902.6667	505902.6667	505902.6667	505902.6667	505902.6667	505902.6667
Residual Value / Km		6.5	6.3	6.3	6.3	6.3	6.3
Tyres Cost- Front		19500	19500	19500	19500	19500	19500
Front Tyres Kms		60000	60000	60000	60000	60000	60000
No of times replaced		1.2	1.3	1.3	1.3	1.3	1.3
Total Cost over Kms		22880	26000	26000	26000	26000	26000
Front Tyres / KM		0.33	0.33	0.33	0.33	0.33	0.33
Rear Tyres Kms		55000	55000	55000	55000	55000	55000
Cost		37000	37000	37000	37000	37000	37000
No of times replaced		1.28	1.45	1.45	1.45	1.45	1.45
Cost		47360	53818	53818	53818	53818	53818
Rear Tyres / KM		0.67	0.67	0.67	0.67	0.67	0.67
Total Tyre Cost		1.00	1.00	1.00	1.00	1.00	1.00
Total Cost Per Km		43.7	41.4	41.4	41.4	41.4	41.4
Cost per ton KM (without DEF)		10.93	10.36	10.36	10.36	10.36	10.36
DEF Consumption (4% of Diesel) per KM		0.0	0.12	0.12	0.12	0.12	0.12
TOTAL Cost per Ton Km (with DEF)		10.93	10.48	10.48	10.48	10.48	10.48

# 610 SK – Value Added Services



Email: amccustomer@tatamotors.com  
Experts take care of your vehicle.  
Year after year

- Hassle-free maintenance
- Coverage or parts/aggregates Failure risk
- Cashless transaction
- EMI facility
- Widest support network
- Genuine spares and high quality service



The telematics service you can trust

- Helping you manage your transport business better by offering
- Enhanced productivity
- Enhanced economy
- Enhanced safety and security



- **Benefit for customer:**  
Assured repair within 15 days. If not, redeemable TCP coupons per day of delay would be payable
- **Eligibility:**  
Vehicles insured by Tata Motors Insurance
- **Scope:**  
Services offered by only select and certified channel partners except North East region and J&K



- Delivery in 24 hours
- All National and State highways
- More vehicle models



- Best in quality
- Wide range of products
- Reduces operating cost
- Unmatched warranty
- Reliable and higher life



- Strict quality control
- Available everywhere
- Higher savings
- Increased vehicle life
- Higher vehicle resale value



Enroll today  
Write to us: delight@tatamotors.com or  
visit us at www.tatadelight.com

## TATA MOTORS LOYALTY PROGRAM BENEFITS

- Earn Tata Points against your spends at Tata Motors
- Vehicle-linked unnamed driver's accidental death cum hospitalization cover
- Bonus of 250 Tata Points on new vehicle registration
- Scholarship for your children
- Chance to win Tata Nano every quarter



- **Benefit for customer:**  
100% commitment for repair of new vehicles within 48 hours. If not, redeemable TGP coupons per day of delay would be payable
- **Eligibility:**  
Repair of vehicles within 12 months from date of sale or 14 months from date of production
- **Scope:**  
Pan-India service except North East region and J&K



Write to us: tatback@tatamotors.com  
SMS 5616161

- Great deals on used Tata vehicles
- Single window service to get better value for used vehicles