

i-Gen6

 **ASHOK LEYLAND**

Aapki Jeet. Hamari Jeet.

# AVTR

ASHOK LEYLAND'S LONG HAUL RANGE



# ABOUT ASHOK LEYLAND

Ashok Leyland Ltd., flagship of the Hinduja group, is the 2<sup>nd</sup> largest manufacturer of commercial vehicles in India. Globally, it is the 3<sup>rd</sup> largest and the 10<sup>th</sup> largest manufacturer of buses and trucks respectively. The Chennai-based \$4.2 billion company has 9 manufacturing plants spread across India, UAE, UK and is present across 50 countries. The company has ISO/TS 16949 Corporate Certification and is also the first truck bus manufacturer outside of Japan to win the Deming prize for its Pantnagar plant in 2016 and Hosur Unit II in 2017

Ashok Leyland has a product range from 2T to 55T Gross Vehicle Weight in trucks, 9 to 80 seater buses, vehicles for defence and special applications, diesel engines for industrial, genset and marine applications. The company has also launched the first Indian electric bus.

Ashok Leyland has a strong legacy of introducing industry first solutions with technologies like the 'Sada' or Inline pump for BSIII engines and the unique iEGR technology for BSIV engines. With a passion to carry the legacy forward and create differentiated solutions, the company has indigenously developed a revolutionary BSVI technology. Ashok Leyland is also the first Indian CV manufacturer to get BSVI certification for its full range of heavy duty trucks.

People, Planet and Profit for all stakeholders, including customers, are at the core of Ashok Leyland, which resonates with the **'AAPKI JEET. HAMARI JEET'** philosophy.



# ASHOK LEYLAND i-Gen6 ADVANTAGE

Over the years, Ashok Leyland Ltd., strove to deliver performance beyond excellence with inline or 'SAADA' pump for BS-III and iEGR technology for BS-IV.

Now with BS-VI, taking the proven iEGR technology up a notch, we are introducing the i-Gen6 engine technology which enhances the engine performance and durability further. With lower Diesel Exhaust Fluid (DEF) consumption and compact design, i-Gen6 lowers the cost of operation, offering better fluid efficiency and low maintenance. The unique Mid-NOx strategy ensures overall lower cost of ownership.

## Innovative



### Improved efficiency -

- Controls NOx generation within the engine itself



### Lower TCO -

- Lower Diesel Exhaust Fluid (DEF) consumption
- Lower operational cost

## Intelligent



### Simple functioning -

- Lesser number of sensors



### Improved life of Exhaust After Treatment System

- Patented air-assisted DEF injection and unique HC dozer
- Lower maintenance cost

## Indian



### Mid-NOx technology

- iEGR + SCR
- Higher fluid efficiency



### Highly robust -

- Best suited for Indian driving condition

- Superior mileage: Proven iEGR engine combined with innovative air intake system and exhaust treatment offers higher performance
- Longer active regeneration intervals: Ensures longer DPF life
- Compact Exhaust After Treatment System: Allows flexibility in packaging / better space utilisation
- Larger Diesel Exhaust Fluid (DEF) tank: Coupled with lower consumption, ensures less frequent DEF refills
- Shortest first pipe length in exhaust system: Best-in-class thermal management

# AVTR - THE ALL NEW TRULY MODULAR TRUCK RANGE

**Introducing AVTR - the revolutionary industry first truly modular trucks from Ashok Leyland - We deliver your dreams.**

The AVTR is a modular platform - the first of its kind in the Indian CV industry - with multiple options of axle configuration, loading spans, cabins, suspensions, drivetrains on a single platform for range of Haulage Trucks, Tippers and Tractors.

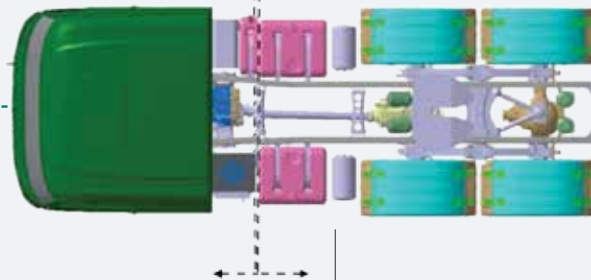
Modularity is an approach where the aggregates of a vehicle are divided into smaller sub-aggregates based on functionality and geometry. These sub-aggregates are called modules and have standardized interfaces. This helps in maintaining interchangeability and reducing number of parts.

The aggregates have also been improved in AVTR, which will ensure higher reliability and low maintenance cost. The AVTR range comes with a range of cabin options with improved safety and comfort features.

The AVTR range can be customised to individual customer's needs - load, terrain, application and operational requirements. AVTR will deliver higher performance and productivity and will improve Total Cost of Ownership (TCO).



**Fixed Module**      **Variable Module**



**Wide range of Trucks**



**Wide range of Tippers**



**Wide range of Tractors**

# BUILD YOUR OWN TRUCK

Modular design now allows to build your own truck to suit your operational requirements like



## Superior Benefits



Best-in-class  
fluid efficiency



Superior Tyre  
Mileage



Higher Reliability &  
Low Maintenance Cost



Better Productivity &  
Performance



Higher Safety



Cabin Options and  
Comfort features



Overall TCO  
advantage

# BEST-IN-CLASS FLUID EFFICIENCY

## Choice of iGen6 series engines to suit your load and road requirements



H Series (200 HP)

- Proven iEGR technology carried forward
- Higher power and torque
- Flat torque curve for maximum mileage

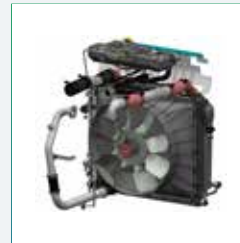


A Series (250 HP)

## New Improved Cooling System



- Wider radiator with centralized cooling fan
- Viscotronic fan clutch reduces fan duty cycle



## Heavy Duty Air Compressor & APDA



- Larger 318 cc air compressor with APDA - reduced idle time for air buildup



## Revolutionary Mid-NOx technology



- Compact EATS
- Air Assisted DEF spray
- Longer Regeneration Interval
- Lowest DEF consumption



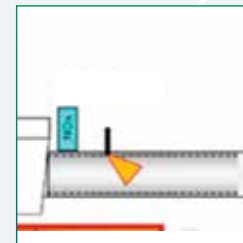
## Right Driveline



- Selection of right Gear Box (& Gear Ratios) and Rear axle (& RAR) as per the Load-Road-Application



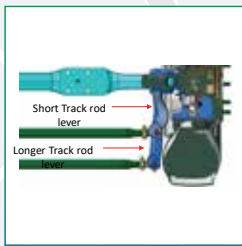
## Unique HC Dozer



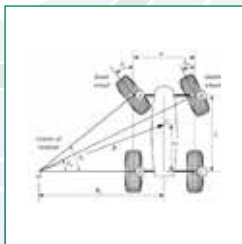
- Unique HC Dozer improves thermal efficiency of EATS
- Less diesel consumption & Longer oil change interval compared to late post injection

# SUPERIOR TYRE MILEAGE

## New Improved Track Rod Levers for Superior Steering Geometry

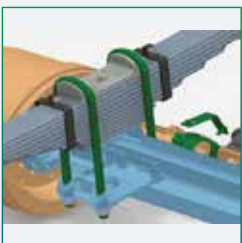


- Different track rod levers based on wheelbases



- Improved Ackermann geometry

## Parallel U Bolts

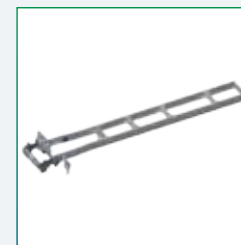


- Parallel U bolts for better torque retention



## Sealed Ball Joints

- Lubricated for life – low end play
- No need for greasing



## Improved Frame

- HSS steel frame. Frame thickness as per load and road (no need of additional flitches) – improved axle alignment
- Fine pitch fasteners for better alignment retention



## Flow Formed Wheels

- Flow formed wheel rims – better surface finish and alignment



## Choice Of Suspension

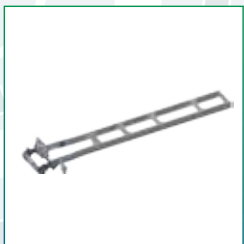
- Suspension choices to suit load/road conditions – no need to add additional spring leaves

# HIGHER RELIABILITY AND LOWER MAINTENANCE



## Heavy Duty Components

- No fabricated brackets used
- 100% brackets are of heavy duty cast iron – assuring structural rigidity



## New Improved Frame Design

- Stronger 11” HSS frame in varying thickness of 6/7/8 mm to suit road-load conditions
- ZAC coated fine pitch fasteners cast iron – assuring structural rigidity



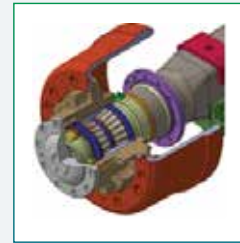
## Integrated Pedal Unit

- Brake and clutch pedals mounted in single unit
- Eliminates need for brake/clutch setting – ensures longer clutch/brake lining life



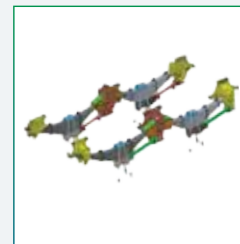
## Grease Free Clutch Operation

- Unilever Clutch actuation
- Requires no greasing
- Smooth gear engagement



## Unitised Wheel Bearings \*

- Grease packed for life
- No periodical greasing / adjustment required



## Slipper Ended Suspension \*

- No of greasing points reduced from 20 to 2
- Lesser Maintenance



## Longer Service Intervals

Change Period	Kms
Engine Oil	80,000
Gearbox Oil	1,60,000
Rear axle Oil	2,00,000
Fuel Filter	80,000
Clutch Oil	1,20,000



## Lube for life Propeller Shaft

- No greasing
- Double honeycomb rubber for enhanced damping

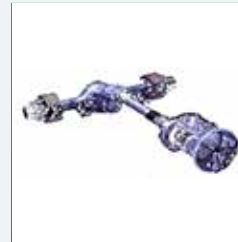


# HIGHER DRIVING COMFORT AND PERFORMANCE



## Higher driving comfort

- All new aerodynamic cab
- Better NVH characteristics
- Choice of 4 cab options to suit application
- Option of AC and HVAC



## Option of drivetrains

- Option of multiple combination of gear box and rear axle ratios to suit application requirements and increase TAT and productivity



## Smoother gearshifts

- Cable gear shift to give car like smooth gear shifts



## Reverse park assist

- Proximity/accident hazard audio warning
- Easy to handle for single driver



## Easier steering

- Larger 21LPM steering pump for lower steering effort



## Advanced Digital Driver Assist ( ADDA )

- Trip wise distance and KMPL
- Gearshift guidance
- Driver score
- User friendly tell tales

# HIGHER SAFETY AND ADD ON FEATURES



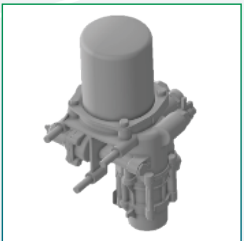
## All metal front fascia

- Full front fascia made of metal – safety assured
- All metal fascia for easy repairability



## Improved visibility

- Double headlamps mounted on bumper
- Wider and long range of visibility
- LED tail Lamps for better visibility and life



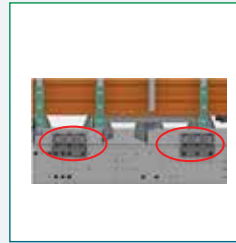
## Improved Braking

- Increased system pressure to 10 bar
- Bigger 318 cc Air Compressor
- PTFC (Push to fit connectors) for all air piping
- APDA(Air Processing & Distribution Assembly) for drying air and removing oil particles



## Improved NRS Suspension

- No projection above frame on NRS suspension – allows taller load bodies and payloads



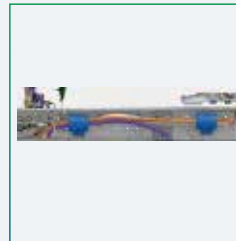
## Load Body Cleat Plates

- Facilitates body Integration
- Better mounting of load bodies
- Saves on additional cost of body mounting U bolts



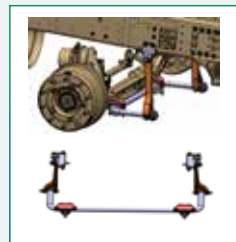
## Load Body Options

- Loading Span from 18ft to 32 ft at every 2ft
- All variants available as cowl, cab, FSD and HSD options
- Full loading span available even on cab chassis with intelligent packaging



## Improved Electricals

- Modular harness – lower no. of unique parts.
- Moulded power cables with guided channels for better safety
- Add on harness for FES models for body building



## Antiroll Bar\*

- Improves safety in high speed and tall loads

# NEW STRONGER AND COMFORTABLE CABIN



**N CABIN**

**U CABIN**

**M CABIN**

**G COWL**

## N Cabin

- Tilttable, suspended cab with dampers for highest ride comfort
- Crash test compliant as per truck code
- Reclining seats for higher driver comfort
- Suspended driver seat.- optional
- Anti-roll bar in the front
- Excellent overhead, rear and glove box storage space
- Full Metal Front Facia & Metal Bumper
- Music system
- AC & HVAC (optional)

## U Cabin

- Front pivoted and rear suspended design
- Crash test compliant as per truck code
- Reclining seats for higher driver comfort
- Anti-roll bar in the front for higher safety
- Full Metal Front Facia
- Optional AC
- Single bigger windshield for better all round visibility
- Metal Bumper with twin Headlamps
- Lowered footstep for easy entry/exit

## M Cabin

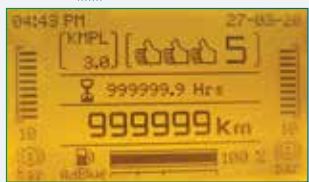
- New styling and improved aesthetics
- New structure with improved strength and rigidity
- Crash compliant as per truck code
- All steel cabin with internal structure and tooled up panels
- Available in day and sleeper versions
- Metal Bumper with twin Headlamps
- Two-piece windshield
- Lowered footstep for easy entry/exit
- Metal Bumper with twin Headlamp

## G Cowl

- New front fascia with improved access to DAT
- New structure with improved strength and rigidity
- Fully customizable to suit your application
- Available in day and sleeper versions
- New styling and improved aesthetics
- Metal Bumper with twin Headlamps
- Lowered footstep for easy entry/exit
- Full Metal Front Facia

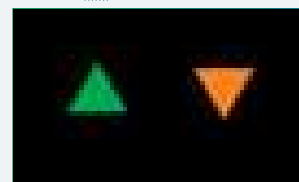
# ADDA: ADVANCED DIGITAL DRIVER ASSIST

Advanced Digital Driver Assist (ADDA) – now a standard feature in all our trucks. This helps the drivers improved their performance significantly. This has features like Gear Shift Advisory System (GSAS), instantaneous fuel economy display, distance to empty gauge, current gear display, DEF gauge, engine hours, air pressure gauge, etc.



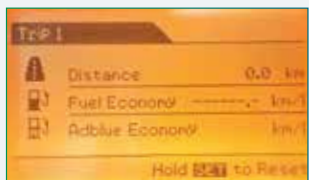
## Instantaneous fuel economy display:

- Get KMPL details instantly on the instrument cluster



## Gear Shift Advisory System (GSAS):

- Non-compliance of the GSAS instructions will show on the instrument cluster through thumbs up and down symbols
- 1/2/3 thumbs up for good compliance
- 1/2/3 thumbs down for poor compliance



## Trip distance and fuel economy:

- Shows the distance and the fuel economy for each trip
- Helps in knowing the distance the vehicle can travel for at the current fuel level

## Reverse Park Alert Systems (RPAS):



Assists in reverse driving and parking



Advisory system with beeper sound during reverse addressing detection zone (1800 mm from rear end) and collision zone (800 mm from rear end)

# TRACTOR RANGE

4X2 TRACTORS  
WITH 2 AXLED TRAILER  
4020



4X2 TRACTORS  
WITH 3 AXLED TRAILER  
4620



6X4 TRACTORS  
WITH 3 AXLED TRAILER  
5525



# 4020 SERIES

4x2 TRACTOR



4020 AG



4020 AM



4020 AU



4020 AN

# 4020 SERIES

4x2 TRACTOR

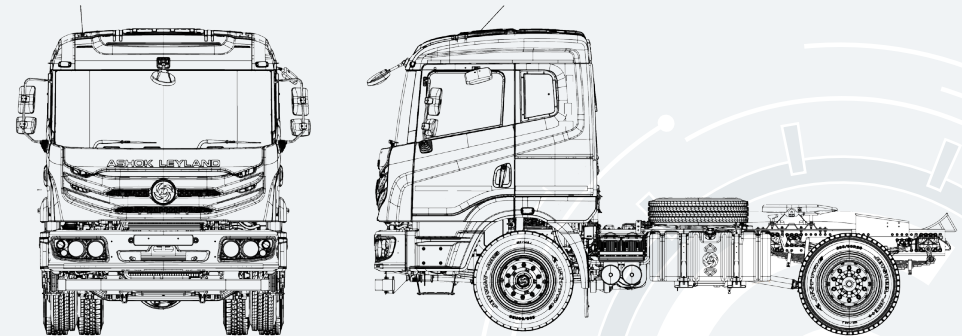
## SPECIFICATIONS

<b>Engine type</b>	H series BS-VI - 6 cylinder, CRS with iGen-6 technology
<b>Max power</b>	200 HP @ 2400 rpm
<b>Max Torque</b>	700 Nm @ 1200 - 2000 rpm
<b>Clutch</b>	380 mm dia - Single dry plate, ceramic clutch with air assisted hydraulic booster
<b>Gear box type</b>	6 speed synchromesh - 3 options
<b>Rear axle</b>	Fully floating single speed rear axle, RAR: 6.17 :1 Optional : Unitized wheel bearings
<b>Front axle</b>	Forged I section – Reverse Elliot type Optional : Unitized wheel bearings /Anti Roll Bar
<b>Suspension</b>	Front: Semi-elliptic multi leaf Optional : Parabolic springs Rear: Semi-elliptic multi leaf, Helper spring – Parabolic
<b>Chassis frame</b>	HSS material with new improved design Dimensions : 275 X 75 X 7 mm / 8mm – Bolted construction
<b>Brakes</b>	Full air dual line brakes with ABS and auto exhaust brake
<b>Fuel tank</b>	Cross Link Polymer Capacity 300L/375L
<b>Ad blue tank</b>	48 Lts
<b>Max speed</b>	80 kmph
<b>Electricals</b>	24 V (120AH) 150AH for AC Models
<b>Tyres</b>	295/90R20 – 16 PR
<b>Cabin</b>	G – Economy Cowl, M -Economy cabin, U -Value cabin and N - Premium cabin - AC option on U/N variants
<b>Vehicle configuration options</b>	Cowl & chassis / Cabin & chassis
<b>Chassis weight (Laden) kgs</b>	FAW – 7000; RAW – 11500 GCW - 39500 (when coupled with 2 axle trailer)

## MAJOR DIMENSIONS

Wheelbase (mm)	3400
Overall length (mm)	5950
Turning circle dia (m)	12.6
Overall width (mm)	2570
Overall height (mm)	M-3145 / U - 3165 / N - 3110

## SCHEMATIC LAYOUT



## APPLICATIONS



LPG  
bullet



Car  
carrier



Container

# iALERT – THE NEXT GEN NAVIGATION ASSISTANT



Route Management



Fuel Management



Trip Management



Service Reminders



Reports and Analytics

Ashok Leyland iALERT, a pioneering product that helps you monitor your vehicle using near real time data. It has been enhanced to accommodate the technical complexities of BSVI, offering a simplified yet intuitive approach to monitor vehicle parameters. It provides deep insights that enables you to take faster decisions. This home-grown system can monitor 100+ parameters at high sampling frequencies 'on the edge'. It enables prognostic models to predict failures and ensures vehicle up time and also provide proactive service support.

## Key features of iALERT

### Much More than Diagnostics:

- It can pre-empt issues before they occur, giving the operators the power to avoid glitches and steer clear of unforeseen expenses or unplanned delays

### 10x Benefits:

- It offers diverse benefits including VHMD, Track and Trace, Geo fencing, Trip Management, Route deviation tracking, Fuel level management, Alerts and Reports, Service reminders, Driver monitoring, Fleet management & Dealer locator.

### Unmatched Response Time:

- Since the on-ground team is relayed complete details about vehicle position and health, the turnaround time for resolution is cut short tremendously, whether critical alert, minor repair or service due.

### Proactive Service Support

- By tracking all Ashok Leyland vehicles coming within their geographical purview, our dealers are better equipped to offer support when and where needed.



# AFTERMARKET NETWORK - 24X7 SUPPORT FOR YOU

Our objective is to always be there for our customers. With this in mind, we aim to increase our network quality and reach across India for easier accessibility of sales, service and spare parts and to maintain a consistent and enriched customer experience. We offer quick support on the highway with 18,000 technical associates through Service Mandi.

## Static outlets

## Dynamic outlets



Dealer Type A+



Dealer Type A



Onsite Service (SASSY)



Quick Service (WOW)



Dealer Type B



Dealer Type C

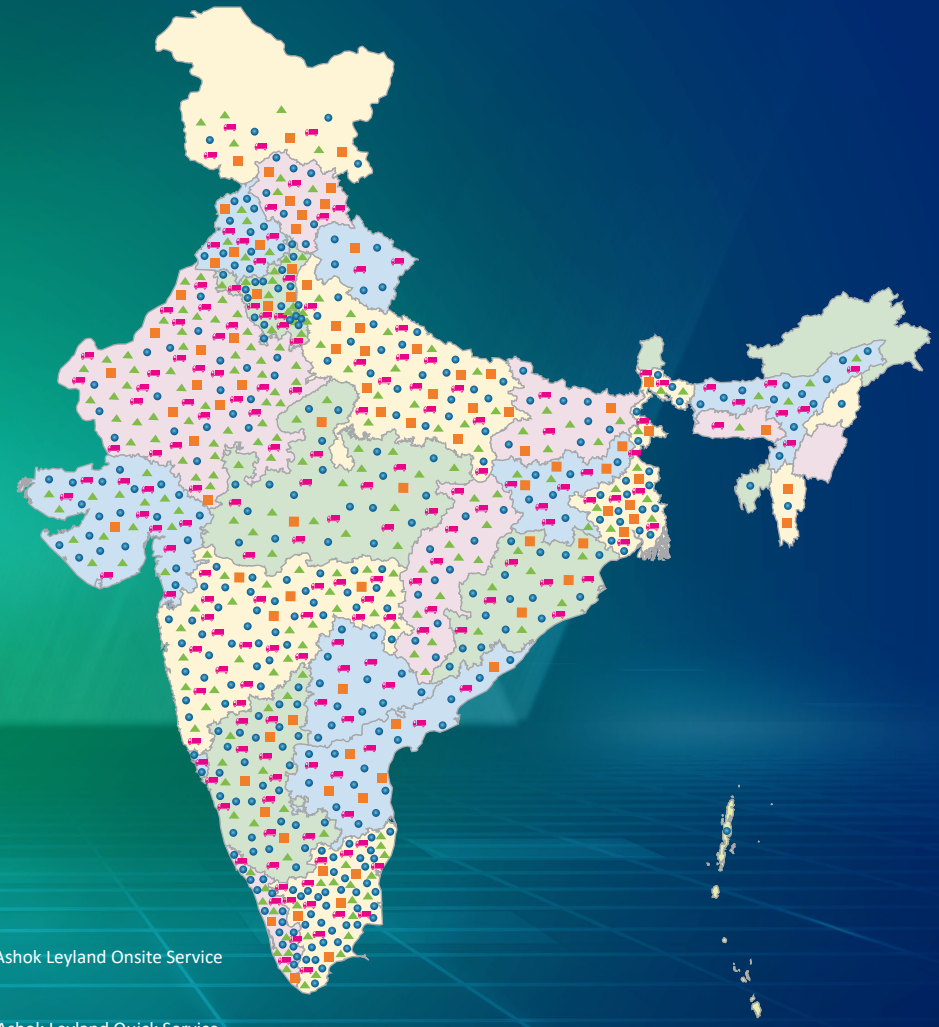


Dealer Type D



ALASC

Touch points	Numbers
Dealers	340+
ASC	290+
Sassy	90+
WOW	180+
Primary touch points	1000+
Mechanic club members	1400+



- Ashok Leyland Authorized Dealer
- Ashok Leyland Onsite Service
- ▲ Ashok Leyland Authorized service
- 🚚 Ashok Leyland Quick Service

## e-DIAGNOSTICS

- Mobile phone - Bluetooth connectivity based diagnostic app to pinpoint the error code of the vehicle ECU
- Guided trouble shooting list pops up to help the technician solve the error
- Step by step visual aids for the technician

## LEYKART

- Offers round the clock availability of spare parts
- Easy search for parts using the vehicle number
- Secure online payment options
- Track orders on mobile and get parts delivered to doorstep



## SERVICEMANDI

- Connects digitally trained and certified workshops across the country
- Hassle-free service experience through mobile apps
- Live updates of vehicle repair on mobile

## RECON

- Factory built high quality reconditioned engines
- Dynamometer tested engines offering high reliability and performance
- Pan India warranty

## LEYPARTS®

- Comprehensive range
- Value for money
- Available at the nearest outlet
- Now in tamper-proof, newly designed cartons

## VALUEPARTS

Right fit for Ashok Leyland vehicles

- Right fit for Ashok Leyland vehicles

## QUICK RESPONSE

- Response within 4 hours
- Restoration within 48 hours

## EXTENDED WARRANTY

- Extended warranty available for longer coverage / period
- Quality and skilled manpower • Improved TAT
- Genuine spare parts • Competitive pricing
- Insulates customer from unknown failures / expenses
- Pan India support

## AMC

- One-stop service solutions
- Flexible maintenance packages
- Pan India service
- Better resale value

## SERVICE TRAINING

- Training service team to ensure quality, productivity and profitability

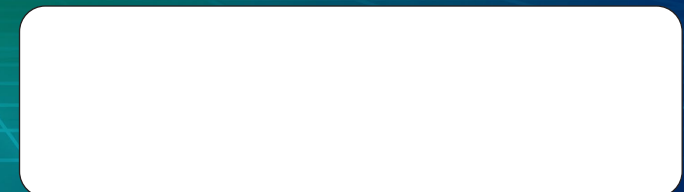
## DRIVER TRAINING

- 11 Driver Training Institutes across India
- Institutes equipped with contemporary vehicles, simulators and modern infrastructure
- State-of-the-art training for drivers of customers, fleet owners and general public

## HELPLINE

**1800-266-3340**

AUTHORISED DEALER:



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E-mail - reachus@ashokleyland.com | Website - www.ashokleyland.com | Helpline Number - 1800 266 3340

Specifications given in the booklet are subject to change



HINDUJA GROUP