

# PRAMC – Equipment's

## Bridge Inspection Vehicle (BIV)

- ❑ Bridges (especially **Major Bridges**) built with considerable investment is **required to be frequently inspected and maintained** to prevent deterioration and possible disasters.
- ❑ The BIV has the **facility to reach the under parts** and sides of the bridges, where deterioration remains unnoticed.
- ❑ This equipment **facilitates more accurate assessment** for the Physical and functional condition of Bridge.



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- ❑ Inspections are performed in addition to routine inspections on bridges that require a **close in depth inspection of critical areas that cannot be reached or safely reached on foot or ladder.**
- ❑ The Vehicle can be used to assess the condition of the structure in detail and conduct the **ND testing of Bridges** at critical parts (such as the Soffit of the super structure, Bearing Locations etc.)
- ❑ The **Inspection** can be carried out **without affecting the traffic movement** over the bridge or with very minimal effect to the traffic.



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### Truck Specifications

- ❑ The vehicle complies to the specifications of ANSI/SIA A92.8– 2012 and other equivalent international standards “Vehicle-Mounted Bridge Inspection and Maintenance Devices”
- ❑ Maximum vehicle travelling dimensions are as follows; width 2.50m; height 4.00m; length 11.06m.
- ❑ Volvo Vehicle FM 330 6x2 Euro 4 Suitable for Indian market, with local support/Service centres
- ❑ Vehicle is fitted with necessary safety and warning lights and signs.
- ❑ The vehicle confirms to the Indian vehicle licensing authority requirements.





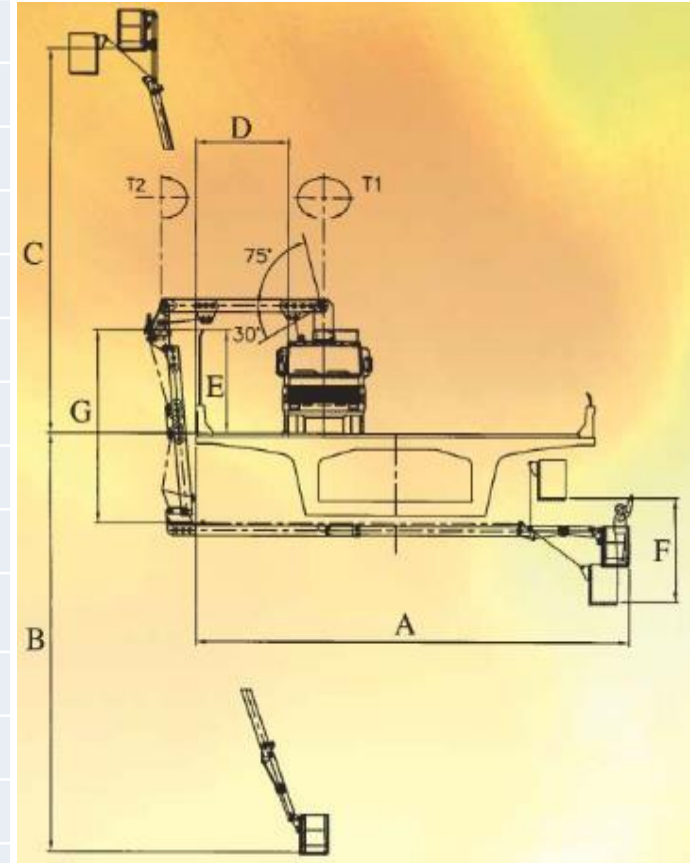
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### Main Characteristic of BIV equipment

- ❑ Truck-mounted unit, self propelled by hydraulic power supply
- ❑ Primary power supply source from chassis engine, PTO and pumps
- ❑ Emergency power supply source from auxiliary electro pumps
- ❑ Automatic levelling system of platform
- ❑ Outreach interlocking limiting device
- ❑ Intercom system between vehicle and platform

Dimensions	AB 12/S
A	12.00 m
B	16.50 m
C	13.20 m
D	3.00 m
E	3.50 m
G	6.50 m
T1	140 deg
T2	180 deg
Payload of Platform :	280 kg
Overall Length :	11.06 m
Overall Width :	2.50 m
Overall Height :	4.00 m
Total Weight :	22,000 Kg



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### Equipment Specifications

- ❑ Operating Range :Up to 12.0 meter Maximum with boom 2 in vertical position
- ❑ Minimum 3 booms to give boom rotation of minimum area of 225 sqm
- ❑ Controls: Electric – Over – Hydraulic with Manual Hydraulic at with remote control facility : Two sets of controls are provided as follows
  - Hydraulic base controls for the emergency retrieval of the booms on chassis body in case of failure of platform controls
  - Platform electro-hydraulic controls for normal operation of equipment.
- ❑ Intercom: Four - Way Intercom system
- ❑ Minimum Lowering Depth 16.50m.
- ❑ Minimum Working Height 15.20m
- ❑ Minimum over-bridging of sidewalk / footway minimum 3.0m

### Platform or Bucket Specifications

- ❑ Minimum working space 1.50 sqm (1.50 x 1.00 x 1.10 – LxWxH)
- ❑ 280 Kg minimum operational capacity (for 3 Persons with tools)