Worlds First
Self Calibrating Alignment System

REVOLUTIONARY LIFT SYNCHRONIZATION
The V3D ARAGO advances “Error-Free” alignment technology with the use of 3 Self-Synchronizing Digital cameras and Automatic Height Indexing. This technology provides the ultimate performance in fast, easy and accurate alignments while minimizing the possibilities of errors due to operator and vehicle variables.

AUTOMATIC LIFT SYNCHRONIZATION

Today, when it is so critically important to optimize favorable working conditions in order to attract and keep experienced, qualified technicians, it is just as important to make the wheel aligning process as easy, fast and as convenient as possible, while maintaining highest levels of productivity and accuracy. Most fixed height V3D installations have a fixed window of camera range in which all the measurement and adjustments must be performed. Adjustments cannot be done both on the floor level and at the full lift height level with a fixed height installation.

Arago™ Technology with automatic lift synchronization, however, allows a technician to do over-the-fender adjustments at floor level and then do under-the-car adjustments at 6’ lift height in no more time than it takes to raise the lift. The Arago technology maintains continuous and accurate readings at each alignment working height.

John Bean’s® exclusive automatic lift synchronization automatically raises and lowers each camera pod as the operator raises or lowers the lift. There is no longer a need to raise or lower the lift and then raise or lower a camera boom in order to get the cameras in range to see the targets on the vehicles. This saves valuable time and helps avoid possible operator error if the cameras are not brought into the correct range. These unique John Bean technologies allow automatic continuous synchronization of the measurement readings whether alignment adjustments are being done at floor level or at the full lifting level of the lift; usually at 6 feet or more.

VISUAL NON GRAVITY BASED MEASUREMENTS
The “Graphic Printout” shows your customers exactly what needs to be done to bring their vehicle into proper alignment.

**GREAT SELLING TOOL!**

The “Final” print out confirms that a quality alignment has been performed thereby increasing customer confidence.

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**SC : SELF CALIBRATING**

Arago™ Technology utilizes three synchronized digital cameras. While two cameras remain aimed and focused on the targets attached to each vehicle wheel, a third camera in the left camera pod is aimed and focused at a target on the right hand camera pod. These cameras have been precisely calibrated in the factory to allow them to continually track each other as well as each of the targets on the vehicle’s wheels even when the lift is going up or down.

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**RIDE HEIGHT MEASUREMENTS**

After selecting the manufacturer’s recommended method for measuring ride height, actual ride heights can be measured and entered into the software for the specific vehicle being aligned. The vehicle’s alignment specifications are then automatically modified to reflect the specific ride heights for the vehicle being aligned.

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**CUSTOMER PRINT OUTS**

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**OPTIONAL EQUIPMENT**

- Remote Readout With 30’ Cable
- VoiceAlign™
  - All major alignment operation commands can be done verbally using our cordless headset. There is no need to return to aligner console during the alignment process.
- Roll Around Adjustment Chair
- Alloy Wheel Clamp
INTUITIVE PROGRAMMING
After beginning the alignment, the software is programmed to know what the operator is doing. It anticipates each step and prompts the operator to the next step without having to key in the specific next step that he would like the machine to do. This makes the alignment easier and faster.

ADVANCED ALIGNMENT MEASUREMENTS

RollingRadius™
Same size tyres from different manufacturers may not always actually be the same size/diameter. This can cause steering pull, which is nearly impossible to diagnose without our RollingRadius™ tyre measuring software.

FrameCheck™
The V3D’s 3-dimensional modelling software does spindle measurements: front and rear wheel setbacks, track widths, and cross diagonal measurements which will indicate when possible frame damage may exist and requires correction before a proper alignment can be done.

NetSpecs™
Downloadable specification updates from the internet to your aligner!

The John Bean Worldwide Automotive Specifications Centre is continually updating its alignment specifications databases. Go to NetSpecs™ on our website, www.jbeg.net, and from there you can view and print specifications for a new vehicle or purchase a 12-month database subscription programme.

Databases can be downloaded directly to the aligner or to a home/office PC. The website will be constantly kept up-to-date with the latest car manufacturer specifications.
Using high resolution digital cameras and patented three dimensional modelling technology, the vertical planes of each of the vehicle’s wheels as well as the plane of the vehicle itself are modelled. The vehicle’s plane is modelled from the centre points of each spindle axis where the wheels attach to the vehicle.

The geometric relationships of each individual wheel plane to each other and to the common vehicle plane determine the various measurements which form the basis for the vehicle’s wheel alignment in three dimensions. The computer then compares these measurements to the car manufacturers’ specifications and tells the operator which angles need to be adjusted and by how much.

This is done with live computerized modelling rather than gravity based measuring devices.

Older alignment technologies use electronic gravity sensors or targets that have to be levelled each time to determine the relationships of the planes of the wheels to surface or lift upon which the vehicle is sitting.

For this older technology to be accurate, one must assume that: the alignment lift or aligning surface is always level; the plane of the vehicle is then always 100% parallel to the “level” aligning surface; and that the sensors which are attached to the wheels are always in correct calibration. Such technology is very equipment and operator dependent, requiring greater operator attention to detail and frequent calibrations for day in and day out quality and accuracy.

The V3D imaging technology offers easier, faster, and more accurate alignments under a much wider range of working conditions.
Features

Alignment Display
- Front Readings
- Rear Readings
- All Readings
- Zoom Readings
- Individual Camber
- Individual Toe
- Individual Caster
- SAI & Thrust Angle
- Included Angle
- Front & Rear Setback
- Front Caster (-28° to +28°)
- Front & Rear Camber (-15° to +15°)
- Front & Rear Toe
- FrameCheck™ - Includes Cross Diagonal Measurement
- RollingRadius™ - Tyre measurement software
- Mechanical turntables
- NetSpecs™ subscription programme
- 3-D Animation
- Live Video Helps (Multimedia)
- 4-Wheel Steer Adjust
- Rear Shim Programs
- Driver Complaint Diagnostics
- All Alignment Diagnostics
- Adjustment Help Files
- E-Z Track Data Base
- Align Specs - 30 years
- E-Z Toe

Three-way System Controls
- Remote control
- Console keyboard

Other Software Features
- Advanced Alignment Measurements with reading/specifications and cross values
- Live 3-D modelling

Alignment Assistance
- 3-D Animation
- Live Video Helps (Multimedia)
- 4-Wheel Steer Adjust
- Rear Shim Programs
- Driver Complaint Diagnostics
- All Alignment Diagnostics
- Adjustment Help Files
- E-Z Track Data Base
- Align Specs - 30 years
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Specifications

Computer Alignment Systems
- Windows XP™ Operating System
- 19” colour display monitor
- Mobile deluxe cabinet
- State-of-the-art CPU, RAM and HD Memory
- DVD / CD drive / 3.5 floppy
- Network card
- Colour Ink Jet Printer
- Modem
- Sound Card
- DVD / CD drive / 3.5 floppy
- Network card
- Colour Ink Jet Printer
- Modem
- Sound Card

Standard Accessories
- Steering wheel holder
- Brake pedal depressor
- Computer mouse
- Remote controller
- Optional Equipment
- Voice Align™
- Slip plates
- Digital remote display
- Universal Alloy wheel clamps, to 21” rims; to 25” with extension kit

Power Requirements
- 230V / 1Ph, 50/60 Hz / 8 amp
- 115V / 1Ph, 50/60 Hz / 8 amp