



**Model:** EEEA523A  
New Jersey JBC  
Emissions Analyzer Setup

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# Installation Instructions

**INSTALLATION MUST BE PERFORMED  
BY  
QUALIFIED JOHN BEAN/EQUISERV PERSONNEL ONLY**

## INSTALLATION OVERVIEW:

The New Jersey JBC Emissions Analyzer is shipped as a fully assembled analyzer, with the exception of the Keyboard, Monitor, Printer, Bar Code Reader and accessories. The following instructions, along with the Monitor Base Kit Instructions (EAK0185L00A), and the Zero Air Kit Instructions (EAK0097C00AF) will provide you with the steps necessary to completely setup the analyzer.

## PARTS & ACCESSORIES LIST:

PART NUMBER	DESCRIPTION	QTY
0131-0031-01	Gas Bottle Regulator	2
0301-0944-01	Filter Element, 75 Micron	4
0301-0945-01	Filter Element, 8 Micron	4
0424-0804-01	Velcro, Loop	14"
0424-0804-02	Velcro, Hook	14"
0507-0025-01	Anti-Dilution Exhaust Probe Tip	1
0528-1088-01	Printer Paper	1
0552-0072-01	1.44 Megabyte Floppy Unformatted	1
0552-0104-01	DOS 6.22 Package	1
0552-0117-01	Keyboard, 101 Key	1
0552-0125-01	Windows 3.11	1
0552-0130-02	Mouse, PS2	1
0552-1086-01	Keyboard Cover Protector	1
0610-1511-04	Screw, Sheet Metal #8 X ¼	4
0692-1834-01	Quality Control Questionnaire, SEL 1403C	1
0692-2462-01	Operators Manual (Generic) Fundamentals Of Vehicle Diagnostic	1
0787-0035	Probe Caps	2
1-11580	Fitting, 1/4" Flare	1
1-12981	Regulator, Nitrogen Bottle	1
1-4281	Filter, In-Line	2
1-7726	Screw, 10x32 x ½", HWHTT	6
2161-0023	Lead Hanger	6
3-608	Monitor, 15" SVGA Color	1
3988-0230-01	Hose Assembly, Exhaust 3/16	1
3988-0231-01	Hose Assembly, Exhaust Dual 3/16	1
5-2645	Clamp, Cable	1

PART NUMBER	DESCRIPTION	QTY
5878-0016	Cable Tie, 14.5"	1
6004-0262-05	Cable Assembly, Trigger Pickup	1
6004-0462	Test Lead, Volt / Ohm	1
6004-0566-01	Cable Assembly, Tachometer Lead	1
6004-0614-01	Antenna Cable	1
6005-0181-01	Adapter Cable Assembly, Nissan Pulsar/Quad 4	1
6005-0184-01	Adapter Cable, Rpm, BMW	1
6005-0184-02	Adapter Cable, Rpm, Acura	1
6-622	Cable, OBD II Communications	1
7009-1869	Probe Exhaust Assembly.	2
7009-1929	Trigger Pickup Assembly.	1
7009-2037-01	Antenna, RPM (Figure 8)	1
7009-2223-01	Adapter, RPM, Nissan 300ZX Turbo	1
EAA0136C01A	Hose, Low Scale Gas ID Tag	1
EAA0136C02A	Hose, Mid Scale Gas ID Tag	1
EAA0145C20A	Gas Cap Tester (Waekon)	1
EAA0190L10A	Hanger, Lead	4
EAA0251L00A	Gas Tank Tester Assembly	1
EAE0050L20A	Printer, LED	1
EAE0050L21A	Cartridge, Printer Toner	1
EAK0097C00AF	Kit, Zero Air	1
EAK0185L00A	Kit, Monitor Base	1
EAL0234C00A	Label, Keyboard	1
EAL0264C00A	Label, Service Call	1
EASC071C82A	Bracket, Bar Code Scanner Storage	1
EASC071C83A	Bracket, Bar Code Scanner Mounting	1
EAW0096C00A	Monitor AC Power Cable	1
EAW0166L10A	Cable, Gas Cap/Tank Tester Interface	1
EAW0179L00A	Cable, Dyno Interface	1
EEEH100A00	2D Bar Code Scanner with Cable	1
EERC102A	Remote Control	1
EESP107FD	Windows 95	1
TEEEA523A	Installation Instructions	1
YA9020	Wheel Chocks	1

**REQUIRED TOOLS:** \_\_\_\_\_

- CALIBRATION GAS
- COMPLETE TOOL KIT
- ANTI-STATIC KIT
- SERVICE KEYS (215 and 225), From Technical Support

INSTALLATION INSTRUCTIONS: \_\_\_\_\_



**NOTE:** *If the SIS was soft shipped (shipped without a carton) skip steps 1 through 4.*

1. Cut the Straps, and remove the top of the carton, top packing, and carton sides.
2. Slide the SIS and carton base off of the pallet, and split the corners of the base carton.
3. Lean the SIS so that one half of the foam base can be removed.
4. Lean the SIS so the other half of the foam base can be removed.
5. Remove all shipping tape from the SIS Cabinet.
6. Check for proper AC and GROUND connections at the outlet. This can be accomplished by using an AC outlet polarity checker that can be obtained at a local hardware store.
7. Place the Operate/Standby switch into the Operate position.
8. Verify that the parts and accessories listed are all present with the analyzer.
9. Following the instructions in the Monitor Base Kit (EAK0185L00A), attach the monitor (3-608) to the SIS.
10. Remove and discard the Monitor AC Power Cable that was shipped with the monitor.
11. Connect the Monitor AC Power Cable (EAW0096C00A) to the back of the monitor, and to the AC port on the rear panel of the analyzer labeled "**Video Power**".
12. Connect the Data cable coming from the rear of the monitor to the port on the rear of the analyzer, below the monitor, labeled "**Video**".

**NOTE:** *The Blue and Red connectors, for the Speakers in the monitor, do not get connected. They can be tie wrapped to the Video Data Cable.*

13. Remove the bubble wrap from the keyboard (0552-0117-01) and the Mouse (0552-0130-02). Ensure that the Keyboard is plugged into the keyboard extension under the monitor.

**NOTE:** *The following step may be complete at the factory.*

14. Attach the Keyboard Label (EAL0234C00A) to the top of the keyboard.
15. Attach the Keyboard Cover (0552-1086-01) to the top of the keyboard.
16. In order to mount Velcro turn the keyboard upside down. Peel the backing off the hook side Velcro (0424-0804-02) and attach to keyboard. Attach soft side (Loop) Velcro (0424-0804-01) to Velcro Hook. Remove backing, exposing adhesive and place keyboard in its proper position and press firmly.
17. Remove the packaging from around the Laser Printer (EAE0050L20A).
18. Load 100 sheets of the package of printer paper (0528-1088-01), into the paper cassette of the laser printer. Place the rest of the paper in the storage drawer.
19. Using the six 10-32x1/2" screws (1-7726), install the six hangers (2161-0023) into the slots on the rear corners of the Analyzer. Three slots are located on each corner of the tester's stand.
20. Attach the four (4) Lead Hangers (EAA0190L00A) to the Unit Handles.

**NOTE:** *The Bar Code Reader Bracket can be mounted on either side of the Analyzer.*

21. Mount the Bar Code Scanner Mounting Bracket (EASC071C83A) to the underside of the Computer Cabinet Sheet Metal Assembly, using two of the #8 X ¼ Sheet Metal Screws (0610-1511-04).

22. Mount the Bar Code Scanner Storage Bracket (EASC071C82A) to the Mounting Bracket just installed, using two of the #8 X ¼ Sheet Metal Screws (0610-1511-04).
23. Connect the DB25 end of the 2D Bar Code Scanner (EEEH100A00) to the Connector labeled "**COMM A1**" on the Rear Panel Connector Plate, located behind the computer.
24. Remove the Gas Cap Tester (EAA0145C20A) from its packaging.
25. Remove the Gas Tank Tester (EAA0251L00A) from its packaging.
26. Attach the CPC end of the Gas Tank/Cap Pressure Tester Communications Cable (EAW0166L10A), to "**COM A2**" on the rear panel of the Service Inspection System.
27. Referring to Figure 1, attach the RJ45 (Phone Plug) end of the Gas Tank/Cap Pressure Tester Communications Cable (EAW0166L10A) to the Gas Tank Pressure Tester "**I/O Port**" labeled "**EIS**".
28. Referring to Figure 1, connect the ring terminal end of the green Ground Wire to the screw labeled "**CONNECT TO EARTH GND**" on the Gas Tank Pressure Tester.
29. Place the Gas Tank Pressure Tester in the Bottle Caddy.
30. Place the Gas Cap Pressure Tester in the other side of the Bottle Caddy.
31. Referring to Figure 1, attach one end of the Gas Tank/Cap Pressure Tester Patch Cable (EAA251L11A) to the "**I/O PORT**" labeled "**GCT**" on the Gas Tank Pressure Tester.
32. Attach the other end of the Gas Tank/Cap Pressure Tester Patch Cable to the Gas Cap Pressure Tester Port labeled "**INPUT/OUTPUT**".



Figure 1, Gas Tank Tester Connections

**NOTE:** *If the male end of the brass fittings do not have Teflon tape on them, place Teflon tape on them before screwing them into another fitting.*

33. Place the Nitrogen Bottle (supplied by the customer) in the Bottle Caddy and secure it by tightening the wing nuts.
34. Attach the regulator (1-12981) to the Nitrogen Bottle.
35. Attach one end of the Yellow Hose (EAH0015L20A) to the regulator on the Nitrogen Bottle.
36. Attach the 1/4" Flare Fitting to the Fitting on the underside of the Gas Tank Pressure Tester.

**NOTE:** *The 1/4" Flare Fitting off the Gas Tank Pressure Tester, which attaches to the Yellow hose, does not need Teflon tape on the flared end.*

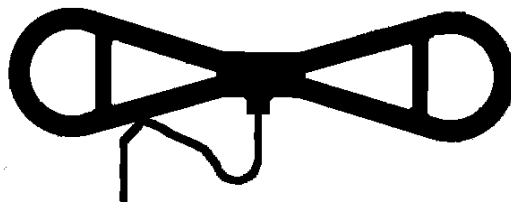
37. Attach the other end of the Yellow Hose to the 1/4" Flare Fitting coming off the Gas Tank Pressure Tester.

38. Place the following items in the storage drawer below the computer and printer section:

- (4) 75 Micron Filter Elements (0301-0944-01)
- (4) 8 Micron Filter Elements (0301-0945-01)
- (1) Laser Toner Cartridge (EAE0020L21A)
- (1) DOS 6.22 Package (0552-0104-01)
- (1) Windows 3.11 (0552-0125-01)
- (2) Exhaust Probe Leak Check Caps (0787-0035)
- (1) BMW RPM Adapter Cable (6005-0184-01)
- (1) Acura RPM Adapter Cable (6005-0184-02)
- (1) Nissan 300ZX RPM Adapter Cable (7009-2223-01)
- (1) Quad 4 / Nissan RPM Adapter Cable (6005-0181-01)
- (1) Remote Control (EERC102A)
- (1) Windows 95 (EESP107FD)
- (1) Anti-Dilution Exhaust Probe Tip (0507-0025-01)
- (2) In-Line Filter (1-4281)

39. Connect the Antenna RPM Cable Assembly (6004-0614-01) to the Antenna Figure 8 Loop (7009-2037-01). Attach the other end of the Antenna RPM Cable Assembly to the “**ANT.**” connector on the rear of the analyzer.

40. Referring to Figure 1, measure back 4” from the connector that attaches to the Figure 8 Loop. Place that point on the cable next to the Figure 8 Loop and place a Cable Tie (5878-0016) on it. This will stop the cable from being pulled out of the Antenna Cable Connector.



**Figure 2, Antenna Tie Wrap Modification**

41. Connect the Trigger Pickup (7009-1929) to the Trigger Pickup Adapter Lead (6004-0262-05).

42. Connect the 30 foot Blue Trigger Pickup Cable (6004-0566-01) to the Assembled pieces in step 33. Attach the other end of the 30 foot Blue Trigger Pickup Cable to the “**TACH.**” connector on the rear of the analyzer.

43. Connect the Volt/Ohm Lead (6004-0462) to the “**V / Ω**” connector on the rear of the analyzer.

44. Connect the OBD II Communications Cable (6-622) to the rear panel connector labeled “**COM A3**”.

45. Connect the Exhaust Hose Assembly (3988-0230-01) to the filter bowls on the rear on the analyzer.

46. Connect the Dual Exhaust Hose (3988-0231-01) to the female quick disconnect fitting on the Exhaust Hose Assembly, installed previously.

47. Following the Instructions in the Zero Air Kit (EAK0097C00AF), mount the Zero Air Bottle to the Analyzer.

48. Connect Exhaust Probes (7009-1869) to both fittings on the end of the exhaust hoses.

49. Attach the regulators (0131-0031-01) to the gas bottles (supplied locally).

50. Attach the hoses (EAA0136C0\*A), with label, to a calibration tank brass fitting, and attach the other end to the rear panel calibration ports.
51. Ensure Service Call Label (EAL0264C00A) is properly filled out, attach it to the rear of the machine, in a place that is easily readable by the customer.
52. Provide the Owner with the Operators' Manual.
53. Completely fill out the Quality Control Questionnaire (0692-1834-01) and mail it according to the instructions printed on the form.
54. Power up the analyzer and wait until the analyzer boots.
55. Reference the New Jersey Auditors Manual for installation and Setup of System Software.

**NOTE:**     *The Wheel Chocks and Dyno Interface Cable will be used in conjunction with the Dynamometer.*

**NOTE:**     *The 1.44 Megabyte Unformatted Floppy Disk (0552-0072-01) will be used when installing software into the Service Inspection System.*

**SETUP COMPLETE**