

Model: EEEA521A

**NEW YORK** 

**Service Inspection System** 

**Analyzer Setup** 

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# **Installation Instructions**

# INSTALLATION MUST BE PERFORMED BY QUALIFIED EQUISERV PERSONNEL ONLY

### INSTALLATION OVERVIEW: \_\_\_\_\_

The SIS-910 New York Analyzer is shipped as a fully assembled analyzer, with the exception of the Keyboard, Monitor, Printer and accessories. The following instructions, along with the Monitor Base Kit Instructions (EAK0185L00A) and the Zero Air Kit Instructions (EAK0097C00A), will provide you with the steps necessary to completely setup the analyzer.

### PARTS & ACCESSORIES:

PART NUMBER	DESCRIPTION	QTY
0131-0031-01	Gas Bottle Regulator	2
0271-0099-01	Calibration Gas	Local
0271-0101-01	Calibration Gas	Local
0301-0944-01	Filter Element, 75 Micron	4
0301-0945-01	Filter Element, 8 Micron	4
0424-0804-01	Velcro, Loop	11"
0424-0804-02	Velcro, Hook	11"
0507-0025-01	Anti-Dilution Exhaust Probe	1
0528-0028-01	Printer, Okidata, 184 Turbo	1
0528-0032-01	Printer, Okidata, 390 Turbo	1
0528-0994-01	Printer Paper	1
0528-0995	Printer Ribbon, Okidata 184 Turbo	1
0528-1094-01	Printer Ribbon, Okidata 390 Turbo	1
0552-0072-01	1.44 Megabyte Floppy Unformatted	1
0552-0117-01	Keyboard	1
0552-0125-01	Windows 3.11	1
0552-1086-01	Keyboard Cover Protector	1
0610-1511-04	Screw, Sheet Metal #8 X 1/4	4
0692-1834-01	Quality Control Questionnaire, SEL 1043C	1
0692-2442-01	Operators Manual (Generic)	1
0692-2453-01	SIS Generic Banner	1
0692-2462-01	Vehicle Diagnostic Manual	1
0692-2469-01	QR Card	1
0787-0035	Probe Caps	2
1-4281	Filter, In-Line	2
1-7726	Screw, 10-32 x 1/2", HWHTT	6
2161-0023	Lead Hanger	6

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PART NUMBER	DESCRIPTION	QTY		
3-608	Monitor, 15" SVGA Color	1		
3988-0230-01	Hose Assembly, Exhaust 3/16			
3988-0231-01	Hose Assembly, Exhaust Dual 3/16	1		
5-2645	Clamp, Cable	1		
5878-0016	Cable Tie, 14.5"	1		
6004-0262-05	Cable Assembly, Trigger Pickup			
6004-0407-01	Probe, Oil Temperature 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 Assembly, Nissan Pulsar/Quad 4	1		
6005-0184-01	Adapter, Rpm, BMW	1		
6005-0184-02	Adapter, Rpm, Acura	1		
6-222	Cable, Video RS232 Interface	1		
6-622	Cable, OBD II Vehicle Interface	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		
EAA0145C00A	Gas Cap Pressure Tester Assembly	1		
EAA0190L10A	Hanger, Lead	4		
EAE0030L00A	Connector, Vmas Loopback	1		
EAK0097C00AF	Zero Air Kit	1		
EAK0185L00A	Monitor Base Kit	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		
EAW0166L03A	Cable, Gas Cap Tester Interface	1		
EAW0179L00A	Cable, MAHA Dyno Interface	1		
EAX0031L02A	Cable, Vmas Communications	1		
EEEH100A00	Scanner, 2D Bar Code (w/Cable)	1		
EERC102A	Remote Control	1		
EESP107FD	Windows 95	1		
TEEEA521A	Installation Instructions	1		
YA9020	Wheel Chock	1		
ZEEEA521A	Operator's Manual	1		

### REQUIRED TOOLS:

- CALIBRATION GAS BOTTLE (0271-0099-01 and 0271-0101-01)
- COMPLETE TOOL KIT
- SECURITY SCREWDRIVER BIT
- ANTI-STATIC KIT
- SERVICE KEYS 215 and 225, (from Technical Support)



### 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 in 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), to attach the monitor (3-608) to the Service Inspection System.
- 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 ensure that it is plugged into the keyboard extension cable under the monitor.

#### NOTE: The following steps may have been completed at the factory.

14. Attach the Keyboard Label (EAL0234C00A) to the top of the keyboard.

### NOTE: Failure to install the keyboard cover will result in the keyboard warranty being voided.

15. Attach the Keyboard Cover (0552-1086-01) to the top of the keyboard.

### NOTE: Proper position of the keyboard is defined by ensuring the keyboard does not come in contact with the Standby/Operate Switch when the printer cover (printer shelf) is lifted.

- 16. In order to mount Velcro turn the keyboard upside down, peel the backing off the hook side Velcro (0424-0804-02) and attach it to the keyboard. Attach the soft side (Loop) Velcro (0424-0804-01) to the Velcro Hook. Remove backing, exposing adhesive, and place keyboard in its proper position and press firmly.
- 17. Place a ¼ of the package of printer paper (0528-0994-01), in the rectangular spot, under the slide out printer shelf of the non-secure printer.

### NOTE: The non-secure printer may already be installed in the analyzer.

18. Remove the Okidata 390 Printer (0528-0032-01) from its carton. Remove all packaging tape from the lower printer and remove the carriage cover to gain access to the print head. Referring to Figure 1, ensure that the printer ribbon cartridge is installed properly and remove the plastic stop that secures the print head.

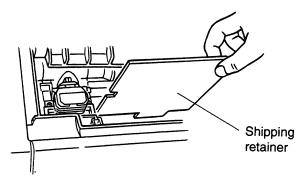


Figure 1, Shipping Retainer Removal

19. Referring to Figure 2, remove the Ribbon Cartridge Inspection Cover, by gently pulling up on the middle of this cover until it pops off.

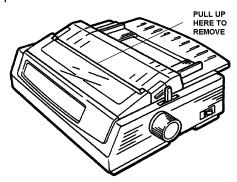


Figure 2, Ribbon Cartridge Inspection Cover Removal

- 20. Place the printer on the printer shelf, in the opening below the keyboard. Attach the power cable and data cable, already located in the analyzer, to their respective ports on the back of the printer.
- 21. Attach a wire tie to the rear of the printer, just behind the power connector of the printer to secure both the Printer Power and Data Cables. This will stop the cables from getting in the way of the paper.
- 22. Load the printer paper, installed in step 17, into the Printer.
- 23. 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.
- 24. 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.

- 25. 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).
- 26. 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).
- 27. Remove the Gas Cap Tester (EAA0145C00A) from its packaging. Place all accessories of the Gas Cap Tester in the storage drawer.

- 28. Attach the RJ45 end of the Gas Cap Tester Interface Adapter Cable (EAW0166L03A) to the RJ45 connector on the Gas Cap Tester.
- 29. Measure back two inches on the end of the Gas Cap Tester Cable just connected. Attach the Cable Clamp (5-2645) at this point on the cable.
- 30. Remove the screw in the bottom left hand corner of the control panel, using the special security screwdriver bit, on the Gas Cap Tester. Using the Screw just removed, attach and secure the cable clamp to the Gas Cap Tester.
- 31. Attach the other end of the Gas Cap Tester Cable to the port labeled "COM A2" on the rear of the analyzer.
- 32. 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) Anti-Dilution Probe (0507-0025-01)
  - (1) Printer Ribbon, Okidata 184 (0528-0995)
  - (1) Printer Ribbon, Okidata 390 (0528-1094-01)
  - (1) Windows 95 (EESP107FD)
  - (1) Windows 3.11 (0552-0125-01)
  - (2) Exhaust Probe Leak Check Caps (0787-0035)
  - (1) Quad 4 / Nissan RPM Adapter (6005-0181-01)
  - (1) BMW RPM Adapter (6005-0184-01)
  - (1) Acura RPM Adapter (6005-0184-02)
  - (1) Nissan 300ZX RPM Adapter (7009-2223-01)
  - (1) Remote Control (EERC102A)
  - (2) In-Line Filter (1-4281)
  - (1) Vmas Loopback Connector (EAE0030L00A)
- 33. 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.
- 34. Referring to Figure 3, 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 3, Antenna Modification

- 35. Connect the Trigger Pickup (7009-1929) to the Trigger Pickup Adapter Lead (6004-0262-05).
- 36. Connect the 30 foot Blue Trigger Pickup Cable (6004-0566-01) to the Assembled pieces in the previous step. Attach the other end of the 30 foot Blue Trigger Pickup Cable to the "**TACH**." connector on the rear of the analyzer.
- 37. Connect the Volt/Ohm Lead (6004-0462) to the "V /  $\Omega$ " connector on the rear of the analyzer.
- 38. Connect the Exhaust Hose Assembly (3988-0230-01) to the filter bowls on the rear on the analyzer.

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- 39. Connect the Dual Exhaust Hose (3988-0231-01) to the female quick disconnect fitting on the Exhaust Hose Assembly, installed previously.
- 40. Connect an Exhaust Probe (7009-1869) to both fittings on the end of the exhaust hoses.
- 41. Attach a regulator (0131-0031-01) to each gas bottle (supplied locally)
- 42. Attach the hoses (EAA0136C0\*A) to the proper gas regulator brass fitting.
- 43. Connect the Oil Temperature Probe (6004-0407-01) to the rear panel port labeled "AUX".
- 44. Attach the OBD II Vehicle Interface Cable (6-622) to the rear panel connector labeled "COM 3A".
- 45. Connect the DB9 end of the Vmas Communications Cable (EAX0031L02A) to "COM G" on the rear panel of the Service Inspection System.
- 46. Attach the other end of the Vmas Communications Cable to the CPC connector on the Vmas.
- 47. Attach the aspirator hose to the Aspirator port located on the rear panel of the Emissions Drawer. Route the other end of the aspirator hose through the base of the analyzer. Ensure that the hose goes through the top and bottom holes in the base.
- 48. Follow the instructions in the Zero Air Kit (EAK0097C00A) to mount the Zero Air Gas Bottle.
- 49. Give the Product and Warranty Registration documentation to the Analyzer Owner and ensure that it is filled out and mailed.
- 50. Place the Service Call Label (EAL0264C00A) on the rear of the machine, as close to the Serial Plate as possible.
- 51. Present the SIS Banner (0692-2453-01) to the customer and offer to hang it in a central location.
- 52. Provide the Owner with the Operators' Manual(s).
- 53. Completely fill out the Quality Control Questionnaire (0692-1834-01) and mail it according to the instructions printed on the form.
- NOTE: The 1.44 Megabyte Unformatted Floppy Disk (0552-0072-01) will be used when installing the software into the Service Inspection System.
- NOTE: The Wheel Chock (YA9020) and Dynamometer Interface Cable (EAW0179L00A) will be used in conjunction with the Dynamometer.
- NOTE: The Video Interface Cable (6-222) is used to interface between the VTR (Video Tape Recorder) and the Host Analyzer on "COM F".
  - 54. Power up the analyzer and wait until the analyzer boots.
  - 55. Ensure the Okidata 390 Printer is on and press and hold **<SHIFT>**, and press **<SEL>**. This puts you in the Menu Mode.
  - 56. Press <GROUP> until "Rear Feed" is displayed.
  - 57. Press <ITEM> until "Rear Feed, Form Tear-Off, Off" is printed.
  - 58. Press **SET**> twice and it will print "**Rear Feed, Form Tear-Off, 1 sec**". This advances the paper to the tear bar automatically after printing a page.
  - 59. Press **PRINT**, and ensure the printout matches Table 1, on the next page. Press **SEL**, to return back to the Print Mode.
  - 60. Reference the New York Auditors Manual for installation and Setup of System Software.
  - 61. Place these Installation Instructions in the appropriate Appendix of your Service Inspection System Service Manual.

Printer Control	Emulation Mode	IBM PPR
<u> </u>	m + 1, 1, 1	10 On with w
Font	Print Mode	LQ Courier 10 CPI
Font	Pitch	No CPI
Font	Proportional Spacing	Normal
Font Font	Style Size	Single
ront	2176	Single
Symbol Sets	Character Set	Set I
Symbol Sets	Language Set	American
Symbol Sets	Zero Character	Slashed
Symbol Sets	Code Page	USA
Rear Feed	Line Spacing	6 LPI
Rear Feed	Form Tear-Off	1 sec
Rear Feed	Skip Over Perforation	No
Rear Feed	Page Length	11 "
near reed	rage being on	
Bottom Feed	Line Spacing	6 LPI
Bottom Feed	Form Tear-Off	Off
Bottom Feed	Skip Over Perforation	No
Bottom Feed	Page Length	11 "
		6.107
Top Feed	Line Spacing	6 LPI
Top Feed	Bottom Margin	Valid
Top Feed	Page Length	11 "
Top Feed	Wait Time	1 sec
Top Feed	Page Length Control	by MENU Setting
Set-Up	Graphics	Uni-directional
Set-Up	Receive Buffer Size	8K
Set-Up	Paper Out Override	No
Set-Up	Print Registration	0
		SHIFT+SET
Set-Up	Operator Panel Function	Full Operation
Set-Up	Reset Inhibit	No
Set-Up	Print Suppress Effective	Yes
Set-Up	Auto LF	No No
Set-Up	Auto CR	No 17.1 CPI
Set-Up	SI Select Pitch (10CPI)	17.1 CP1 12 CPI
Set-Up Set-Up	SI Select Pitch (12CPI) Time Out Print	Valid
Set-Up	Auto Select	No
Set-Up	Graphics Speed	Low
Set-Up	Centering Position	DEFAULT
Set-Up	Decollator	No
	<b></b>	
Parallel I/F	I-Prime	Buffer Print
Parallel I/F	Pin 18	+5∨
Printer Control	Emulation Mode	IBM PPR

**Table 1, Printer Menu Selections** 

SETUP COMPLETE