Installation Instructions

INSTALLATION MUST BE PERFORMED
BY
QUALIFIED PERSONNEL ONLY

INSTALLATION OVERVIEW: _____

The John Bean Texas 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), 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
0271-0062-01	Low Scale, Calibration Gas	Local
0271-0066-01	Mid Scale, Calibration Gas	Local
0301-0944-01	Filter Element, 75 Micron	4
0301-0945-01	Filter Element, 8 Micron	4
0507-0025-01	Anti-Dilution Exhaust Probe	1
0528-0032-01	Printer, Okidata 390 Turbo	1
0528-1011-02	Printer Paper	1
0528-1094-01	Ribbon, Printer	2
0552-0072-01	1.44 Megabyte Floppy Unformatted	1
0552-0104-01	DOS 6.22 Package	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 1043C	1
0692-2442-01	Operators Manual (Generic)	1
0692-2445-01	Installation Instruction	1
0692-2462-01	Vehicle Diagnostic Manual	1
0787-0035	Cap	2
1-4281	Filter, In-Line	2
1-7726	Screw, 10x32 x ½" HWHTT	6
2161-0023	Lead Hanger	6
3-606	Monitor, 15" SVGA Color	1
3988-0230-01	Hose Assembly, Exhaust 3/16	1
3988-0231-01	Hose Assembly, Exhaust Dual 3/16	1
5878-0016	Cable Tie, 14.5"	1
6004-0262-05	Cable Assembly, Trigger Pickup	1
6004-0462	Test Lead, Volt / Ohm	1

PART NUMBER	DESCRIPTION	QTY
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
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
7049-0004-01	O2 Sensor	1
EAA0136C01A	Hose, Low Scale Gas ID Tag	1
EAA0136C02A	Hose, Mid Scale Gas ID Tag	1
EAA0190L10A	Hanger, Lead	4
EAK0185L00A	Monitor Base Kit	1
EAL0234C00A	Keyboard Label	1
EAL0264C00A	Label, Service Call	1
EASC071C82A	Bar Code Scanner Storage Bracket	1
EASC071C83A	Bar Code Scanner Mounting Bracket	1
EAW0096C00A	Monitor AC Power Cable	1
ZEEEA116A	Operator's Manual (Specifically For Texas)	1

REQUIRED TOOLS: _____

- **MID GAS BOTTLE (0271-0066-01)**   **LOW GAS BOTTLE (0271-0062-01)**

- **COMPLETE TOOL KIT**   **ANTI-STATIC KIT**

- **SERVICE KEYS (from Technical Support (215, and 225)**

INSTALLATION INSTRUCTIONS: _____

⚠ **WARNING!**

USE STANDARD ANTI-STATIC PROCEDURES
WHILE PERFORMING THESE 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 machine.

9. Following the instructions in the Monitor Base Kit (EAK0185L00A), attach the monitor 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, and ensure that it is plugged into the keyboard extension under the monitor.

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

14. Attach the Keyboard Label (EAL0234C00A) to the top of the keyboard (0552-0117-01).

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. Place a package of printer paper (0528-1011-02), in the rectangular spot, under the slide out printer shelf.

18. Remove the Printer (0528-0032-01) from its carton. Remove all tape from the 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.
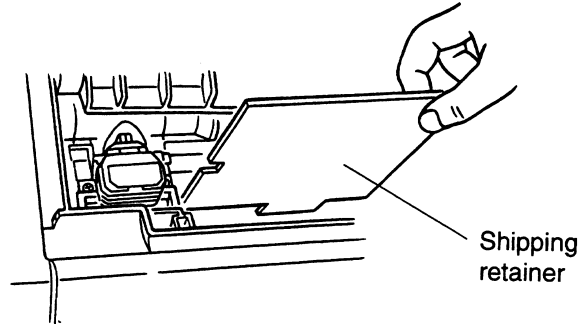

Shipping retainer

Figure 1, Shipping Retainer Removal

19. Load the printer paper, installed in step 16 into the Printer.

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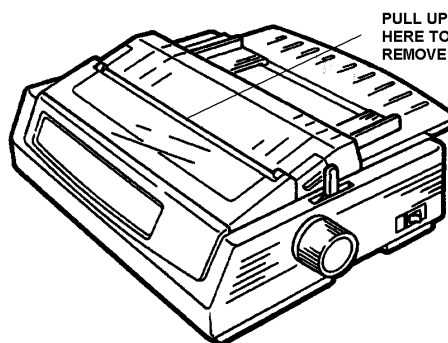

PULL UP HERE TO REMOVE

Figure 2, Ribbon Cartridge Inspection Cover Removal

21. 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.

22. 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.

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. Place the following items in the storage area:

    - (4)   75 Micron Filter Elements (0301-0944-01)
    - (4)   8 Micron Filter Elements (0301-0945-01)
    - (1)   Printer Ribbon (0528-1094-01)
    - (1)   DOS 6.22 Package (0552-0104-01)
    - (2)   Exhaust Probe Leak Check Caps (0787-0035)
    - (1)   Anti-Dilution Exhaust Probe Cap (0507-0025-01)
    - (1)   BMW RPM Adapter (6005-0184-01)
    - (1)   Acura RPM Adapter (6005-0184-02)
    - (1)   Nissan 300ZX RPM Adapter (7009-2223-01)
    - (1)   Quad 4 / Nissan RPM Adapter (6005-0181-01)
    - (2)   In-Line Filter (1-4281)

28. 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.

29. 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.
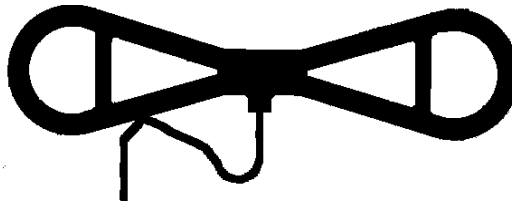

Figure 3, Antenna Tie Wrap Modification

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

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

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

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

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

35. Connect an Exhaust Probe (7009-1869) to both fittings on the end of the exhaust hoses.

36. Attach the two brass fittings (0647-0069) to the regulators (0131-0024).

37. Attach the regulators to the gas bottles (supplied locally).

38. Attach the hoses (EAA0136C0*A), with label, to the proper calibration tank brass fitting.

39. Attach the aspirator hose to the Aspirator (located below the primary filter bowl). 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 of the base.

40. Unpack the Gas Cap Pressure Tester Assembly (EAA0144C00A), and place all the accessories to that unit in the storage drawer.

41. Connect the Gas Cap Pressure Tester Cable to the Gas Cap Pressure Tester and the other end to the port on the rear of the SIS label "**COM F**".

42. Remove the Oxygen Sensor cover, retain the hardware.

43. Screw Oxygen Sensor into Oxygen Block and attach the Oxygen Sensor Harness to the Oxygen Sensor.

44. Re-mount the Oxygen Sensor Cover.

45. Give the Product and Warranty Registration documentation to the Analyzer Owner and ensure that it is filled out and mailed.

46. Place the Service Call Label (EAL0264C00A) on the rear of the machine, in a place that is easily readable by the customer.

47. Provide the Owner with the Operators' Manuals.

48. Completely fill out the Quality Control Questionnaire (0692-1834-01) and mail it according to the instructions printed on the form.

49. Power up the analyzer and wait until the analyzer boots.

50. Ensure the printer is on and press and hold **<SHIFT>**, and press **<SEL>**. This puts you in the Menu Mode.

51. Press **<GROUP>** until "**Rear Feed**" is displayed.

52. Press **<ITEM>** until "**Rear Feed, Form Tear-Off, Off**" is printed.

53. 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.

54. Press **<PRINT>**, and ensure the printout matches Table 1, on the next page. Press and hold **<SHIFT>**, and press **<SEL>**, to return back to the Print Mode.

55. Reference the Texas Auditors Manual for installation and Setup of System Software.

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Printer Control      Emulation Mode                IBM PPR

Font                 Print Mode                    LQ Courier
Font                 Pitch                         10 CPI
Font                 Proportional Spacing          No
Font                 Style                         Normal
Font                 Size                          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 "

Bottom Feed          Line Spacing                  6 LPI
Bottom Feed          Form Tear-Off                 Off
Bottom Feed          Skip Over Perforation         No
Bottom Feed          Page Length                   11 "

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
|||||||||||||||||||||||||||||||||   SET    |||||  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
Set-Up               Auto CR                       No
Set-Up               SI Select Pitch (10CPI)       17.1 CPI
Set-Up               SI Select Pitch (12CPI)       12 CPI
Set-Up               Time Out Print                Valid
Set-Up               Auto Select                   No
Set-Up               Graphics Speed                Low
Set-Up               Centering Position            DEFAULT
Set-Up               Decollator                    No

Parallel I/F         I-Prime                       Buffer Print
Parallel I/F         Pin 18                        +5v


Printer Control      Emulation Mode                IBM PPR
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Table 1, Printer Menu Selections

SETUP COMPLETE