

BAR OBD Inspection System (BAR-OIS)

BAR Advisory Group

Paul Hedglin

January 15, 2015



BAR-OIS Equipment Requirements

Beginning March 9, 2015:

- Smog Check stations must use an OBD Inspection System to test the following vehicles:
 - 2000 and newer model-year gasoline powered vehicles (unless over 14,000 lbs. GVWR or those without OBDII)
 - 1998 and newer diesel powered vehicles
 - All hybrid vehicles (2000 and newer model year)
- The BAR-97 EIS must not be used to inspect the above vehicles.
- All STAR certified stations are required to have an OIS and BAR-97.
- Inspections must be performed per the 2013 Smog Check Manual.

BAR-OIS Availability

- BAR Certified DADs now available from three vendors: Applus, Drew, and Worldwide (Bosch in Beta testing)
- Equipment packages (Cabinet, PC, Bar Code Scanner, Printer) utilizing certified DADs are available from: Applus, Drew, ESP, Worldwide, Bosch (SPX), and Banalogic
 - You may also Build your own system: minimum standards apply; see “BAR-OIS Off-the-shelf-equipment requirements” on BAR’s Web page

Certified DAD Equipment

Home : [Industry](#) : **Certified Data Acquisition Devices**

Bureau of Automotive Repair OBD Inspection System Certified Data Acquisition Devices

VENDOR	MODEL NAME	MODEL NUMBER/TYPE (Wired/Wireless)	DATE CERTIFIED
Applus Phone: (855) 766-4323 Fax: (847) 616-6036 Email: smogdaddy@aplustech.com	Smog DADdy User Manual	310-0909 / Wired 310-0910 / Wireless	06/13/2014
Drew Technologies Phone: (877) 888-2534 Email: support@drewtech.com	IMclean User Manual	01 / Wired bt-01 / Wireless	06/20/2014
Worldwide Environmental Products, Inc. Phone: (714) 990-2700 Email: info@wep-inc.com	WEP OBDII DAD User Manual	2909055 / Wired 2909055 / Wireless	09/10/14

NOTICE TO STATIONS: A Disclosure Agreement must be on file with the Bureau of Automotive Repair (BAR) before your station will be able to access the California BAR-OIS Software to begin testing using your new DAD. The DAD Vendor is responsible for providing your station a Disclosure Agreement and submitting your completed agreement to BAR.

[Back to Top](#) [Conditions of Use](#) [Accessibility](#) [Privacy Policy](#) [Contact Us](#)

OIS Hardware Options

Certified DADs



Applus



Drew



Worldwide

Sample of OIS Packages



Applus



OTC
(Bosch/SPX)



ESP



Banalogic



Worldwide

Additional BAR-OIS Training

- Go to www.smogcheck.ca.gov for OIS Training
 - OIS Registration Video
 - OIS Software Download Video
 - California BAR-OIS: User Guide (screen shots)
 - On Board Diagnostic Inspection System Q&A
 - 2013 Smog Check Manual
 - Smog Check Reference Guide
 - Smog Check Inspector Update Training
 - Connect DAD per DAD user manual from vendor

OIS Implementation Status

- Currently, about 5,400 active OIS
- Inspection volume about 40% BAR-97 and 60% OIS

BAR-OIS Software Updates

- v5.15 released 12/9/2014 contained visual inspection entry changes
- v5.15.1 released 12/18/2014 contained new driver for Applus DADs
- V5.16 planned for 1/29/2015 will contain:
 - Auto receipt printing when certificates ordered
 - Fixed tab key order on various screens

OBD Readiness Monitor Changes

- To be implemented 5/1/2015 on both BAR-97 and BAR-OIS
- Gasoline powered:
 - One incomplete monitor allowed for 1996 to 1999
 - Only the evaporative monitor allowed incomplete for 2000 and newer
- Diesel powered:
 - Zero monitors allowed incomplete for 1998 to 2006
 - Only the exhaust after-treatment system* monitor (e.g., particulate filter) allowed incomplete for 2007 and newer

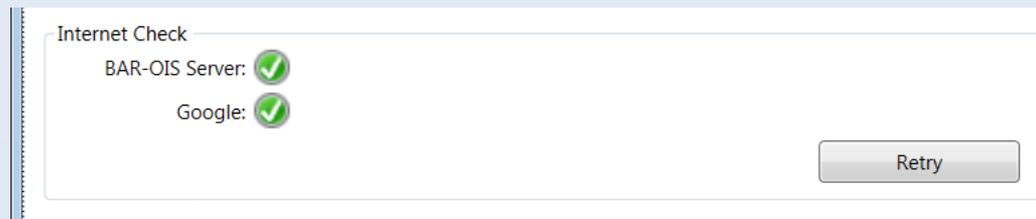
[* includes all monitors related to tailpipe: PM filter, NOx/SCR treatment, catalyst]

OBD Readiness Monitor Changes

- BAR-97 Vehicle Lookup Table being updated to support OBD monitor readiness changes
- BAR-97s without new VLT will be locked out of performing inspections
 - See 12/18/2014 BAR ET Blast for details
 - A few hundred BAR-97 EIS still need update out of about 7,000
- For OIS, VID will change OBD readiness monitors on 5/1/2015

Check for BAR-OIS Connectivity Status

- Use BAR-OIS Server and Internet (Google) indicators in BAR-OIS Software
 - Go to: File, Self Diagnostics
 - Press, Refresh. Red (x) indicator shows when BAR-OIS Server down or Station's Internet connection has failed



Check for BAR-OIS Connectivity Status

- BAR Industry Help Desk phone recording will include a BAR-OIS server message during BAR-OIS server outages
 - “You have reached the BAR Industry Help Desk. Currently we are experiencing an outage that prevents you from performing BAR-OIS inspections. We are aware of this issue and are working to fix the problem as soon as possible. You may monitor connection status by viewing the BAR-OIS Server indicator built into the BAR-OIS software.”

Reducing Failures for “No OBD Communication”

- A very small percentage of vehicles have failed for “no OBD communication” due to unexpected vehicle data
- After a 12/29/2014 VID update, almost all of these vehicles now successfully communicate with the OIS
- If issue is observed during inspection, provide description in the comments box on the Smog Check Results Screen in the OIS software
- Call BAR Industry Help Desk to log ticket for BAR Engineering to investigate (866.860.8509)
- ARB’s OBD certification group works with OEMs to provide BAR guidance on how to inspect/fix vehicles that were built out of compliance with OBD regulations

Reducing Failures for “No OBD Communication”

- Possible faulty DLC power/ground
 - DADs designed to still communicate with vehicle
 - Follow DAD Vendor user guide
 - Look for DAD or DAD software indicators of poor connection
 - Use auxiliary DAD power / ground cables when appropriate
- Connect and Disconnect DAD only when prompted by the OIS software

Hybrids

- April 1, 2015 implementation
 - Change of Ownership
 - Initial to California
 - Biennial with DMV registration renewal notices
- July 1, 2015 phased (50/50) biennial inspections due
 - Calendar Year 2015 – Model Years 2005-2007 (in warranty)
 - Calendar Year 2016 – Model Years 2000-2004 & 2008-2009
- OIS inspection, no visible smoke test
- Other states have found that the main failure modes are catalyst and hybrid battery
 - Per Smog Check Reference Guide, Aftermarket Parts Verification Table...hybrid battery enhancements don't need E.O.
- Q&As and BAR ET Blast reminder will be provided in March 2015