

Inspection Procedure **GDF-09**

Gasoline Dispensing Facilities

PHASE II BALANCE SYSTEM

INSERTION INTERLOCK OPERATION DETERMINATION

1. PURPOSE

- 1.1 The purpose of this inspection procedure is to provide a methodology to ensure the proper operation of the insertion interlock on a Phase II balance system nozzle.

2. PRINCIPLE AND SUMMARY

- 2.1 A balance system nozzle is checked to ensure proper operation of the insertion interlock. If the nozzle is operating properly, fuel cannot be dispensed without the dispenser being activated and bellows compressed. A defective insertion interlock results in excess spillage of gasoline.

3. BIASES AND INTERFERENCES

- 3.1 If the bellows of the balance system nozzle is not fully compressed, the insertion interlock may not properly activate.
- 3.2 If the proper methodology for the specific nozzle type is not employed, proper operation of the insertion interlock may not be determined.

4. EQUIPMENT

- 4.1 **Approved Gas Can.** Use an approved gas can to hold any gasoline that may be dispensed during testing.

5. INSPECTION PROCEDURE

- 5.1 Remove the nozzle to be tested from the dispenser holster. **DO NOT ACTIVATE THE DISPENSER.** Determine if the nozzle is listed:

- a) Emco Wheaton A4000
- b) Emco Wheaton A4001 [These nozzles not allowed in some Districts, e.g. BAAQMD]
- c) Emco Wheaton A4005
- d) EZ-Flo Rebuilt A4000
- e) EZ-Flo Rebuilt A4001 [These nozzles not allowed in some Districts, e.g. BAAQMD]
- f) OPW-111V
- g) Husky Model V

- 5.2 **DO NOT ACTIVATE THE DISPENSER. DO NOT COMPRESS THE BELLOWS.** If the nozzle is on the list shown in Section 5.1, pull the nozzle trigger.

- 5.3 Record on the Field Data Sheet whether the nozzle trigger had, or did not have, tension, as shown in Form 1. Tension on the trigger without the bellows being

compressed indicates the insertion interlock may not be functioning correctly, proceed to subsection 5.3.1. If the nozzle trigger had no tension with the bellows uncompressed, the insertion interlock is functioning properly.

5.3.1 Place the nozzle tip so that any dispensed gas would flow into the approved gas can. Activate the dispenser. Use caution to avoid spillage and splash-back. **DO NOT COMPRESS THE BELLOWS.**

5.3.2 Pull the trigger and observe if gasoline is dispensed and continues to flow after 1 second. Release the trigger. Return the nozzle to the dispenser holster. Record, on the Field Data Sheet, whether fuel was dispensed and the quantity dispensed. If fuel is dispensed after 1 second, the insertion interlock is defective and the nozzle must be repaired or replaced.

5.4 If the nozzle is not on the list shown in Section 5.1, activate the dispenser and place the nozzle tip so that any dispensed gasoline would flow into the approved gas can, **DO NOT COMPRESS THE BELLOWS.** Use caution to avoid spillage and splash-back.

5.4.1 Pull the trigger and observe if gasoline is dispensed and continues to flow after 1 second. Release the trigger. Record, on the Field Data Sheet, whether fuel was dispensed and the quantity dispensed. If fuel continued to be dispensed after 1 second the insertion interlock is defective and the nozzle must be repaired or replaced.

6. REPORTING RESULTS

6.1 Record the following information on a Field Data Sheet similar to that shown in Form 1:

- a) Dispenser Number
- b) Gasoline Grade or Octane
- c) Nozzle Make and Model Number
- d) Was Trigger Tension noted, or
- e) Was fuel dispensed after one second

7. POST-INSPECTION PROCEDURES

7.1 Carefully pour any remaining gasoline from the gasoline can into the product drop tube of the gasoline grade with the lowest octane rating, typically 87 octane. To reduce inspection-related emissions, ensure that no gasoline is spilled during this transfer. Notify the facility owner/dealer of the quantity of gasoline dispensed into the approved gas can.

