HONEYWELL

ENGINEERING SPECIFICATION

Q179A, B, GAS PILOT

No. ES 2337

REV. A

Development No.	HD2186			
-		APPROVAL	DATE	
DESIGN MANAGER	(Section I):			
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PROCESS MANAGE	R (Section II):			
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QUALITY MANAGE	R:			

REVIEWED BY:

REVISION HISTORY

REV	ECO	DATE	REV	ECO	DATE	REV	ECO	DATE
А	0017835	12-28-05						

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SECTION I - GENERAL DESIGN SPECIFICATIONS

A. General Description

The Q179A is a gas pilot assembly which includes an electrode for electric spark ignition of the pilot, and a flame electrode for electronic flame detection when used with an R190 or similar device. Flame electrodes are provided for use with the various burner tips, and orifices are provided for operation with natural and mixed, manufactured and LP gas. The assembly is provided with a third electrode which acts as a ground for the flame and as a shield between the ignition port and the flame electrode. The current through the flame rod when used with an R190 relay is approximately 2 microamperes.

The ignition electrode is designed for operation with a 6000 volt grounded secondary ignition transformer. The gap between the ignition electrode and the nearest point of the burner tip shall be 1/16 + 1/32 to -0.

Some Q179A models are less the flame detection electrode assembly and the ground electrode.

The Q179B is similar to the Q179A except the ignition electrode and associated mounting parts are omitted.

- B. Test Requirements
 - 1. Check ignition.
 - 2. Check gas flame.
 - Minimum flame current when checked as shown in C-2811 is 1.5 ua, for normal gas pressures. (Flame rod may have to be adjusted to obtain this current.) (Not applicable for models without flame detection electrode.)

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SECTION II - FACTORY SPECIFICATIONS

A. Process Requirements

- 1. Adjust ignition electrode by re-positioning of electrode or insulator until a 1/16'' + 1/32'' to -0 gap exists between the end of the ignition electrode and the nearest point on the burner tip.
- 2. Identify per E.S. 116.
- B. Adjustment
 - 1. None

C. Inspection

- 1. Check or supervise all processes and adjustments.
- 2. Check per O.S. card and appropriate assembly drawing for correct choice and assembly of tip, body, type of gas and electrode.
- 3. Inspect for correct assembly, workmanship, finish, identification, proper packaging and labeling.