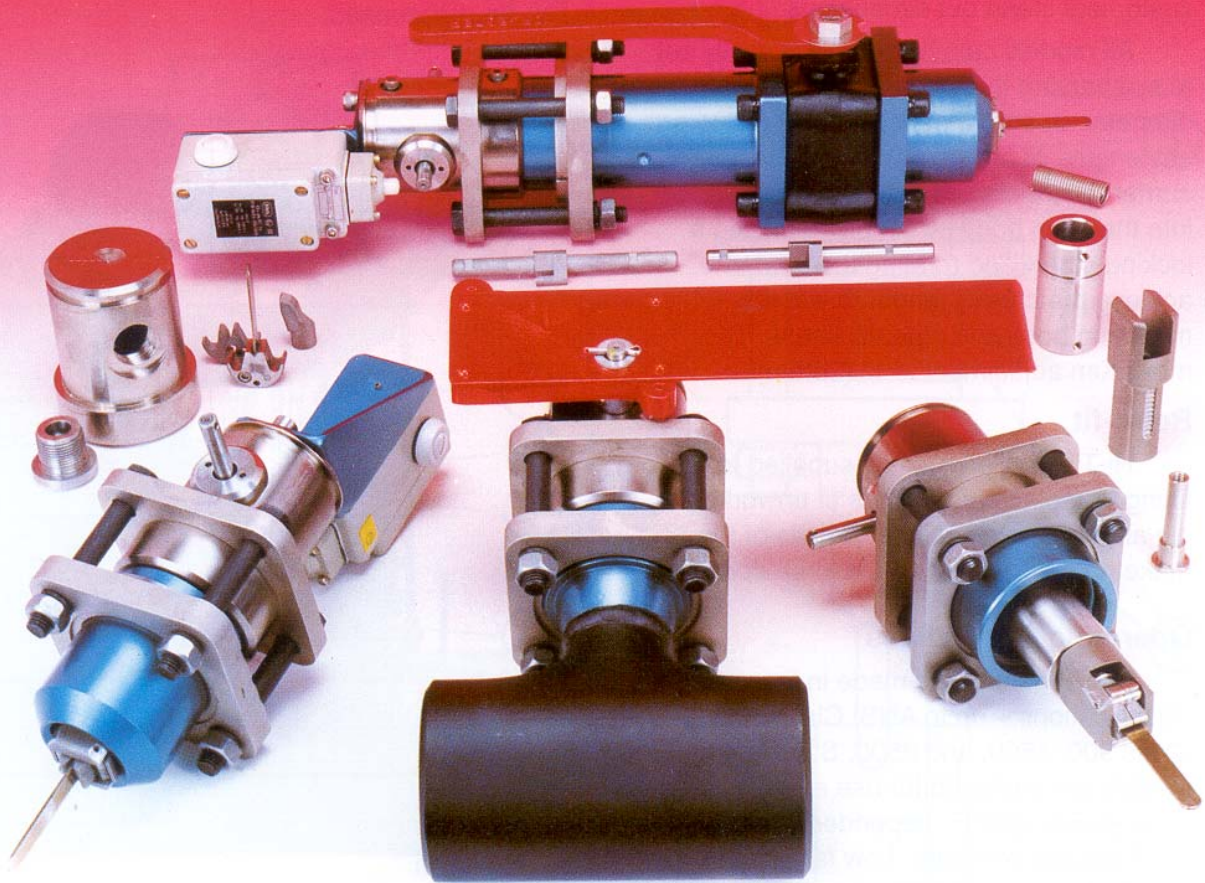


# Hi-T Pigalerts®



**Pig and Sphere  
Signallers**

**Scraper Passage  
Detectors**

GIRARD



**GIRARD INDUSTRIES**

## Reliability

The proven pivotless tumbler mechanism and laminated trigger blades provide the necessary depth of penetration into the pipeline to give a positive signal in all circumstances with negligible effect on the flow.

The trigger has also been extensively tested with on line inspection pigs and the Hi-T signaller carries full British Gas approval.

## Adjustable Penetration

The length of trigger extension into the pipeline is pre-set at the factory to suit customers stand out dimensions.

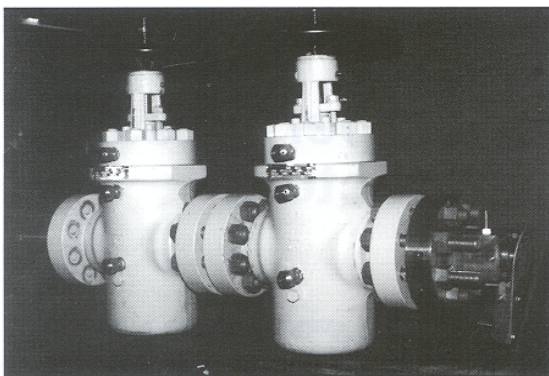
All models can, however, be easily set to suit varying thicknesses of pipeline of any diameter on site without being limited to pre-set lengths of mounting bases. The trigger carrier mechanism is extended or retracted into the main body by simply releasing a locking screw and rotating the carrier to achieve the correct length to suit the mounting boss and pipe thickness. The maximum adjustment is 1" (25mm).

## Retro-fit

Hi-T signallers can be supplied for retrofitting to replace most types of unworkable pig and sphere signallers. Details of the make and model of base must be specified.

## Operating Capabilities

Hi-T Pigalerts are made in four pressure classifications – up to ANSI Class 600, ANSI Class 900, 1500, and 2500. Standard models are designed for use at temperatures from  $-4^{\circ}\text{F}$  to  $392^{\circ}\text{F}$ , dependent upon the line products and pressure. Low temperatures to  $-58^{\circ}\text{F}$  can be contained using Fluorosilicon seals.



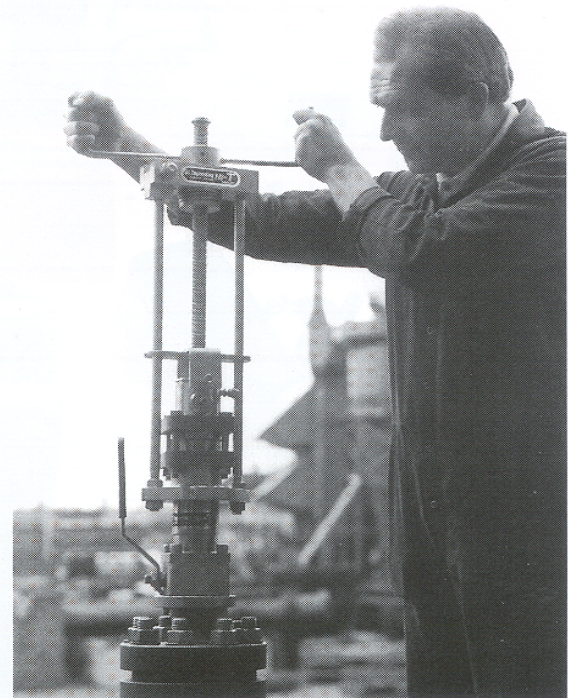
Models for ANSI Class 2500 working at 6170 psi (425 bar) are also available.

## Selection

All models are bi-directional, available with mechanically operated signal flags, electrical auto resetting switches or both mechanical and electrical signals.

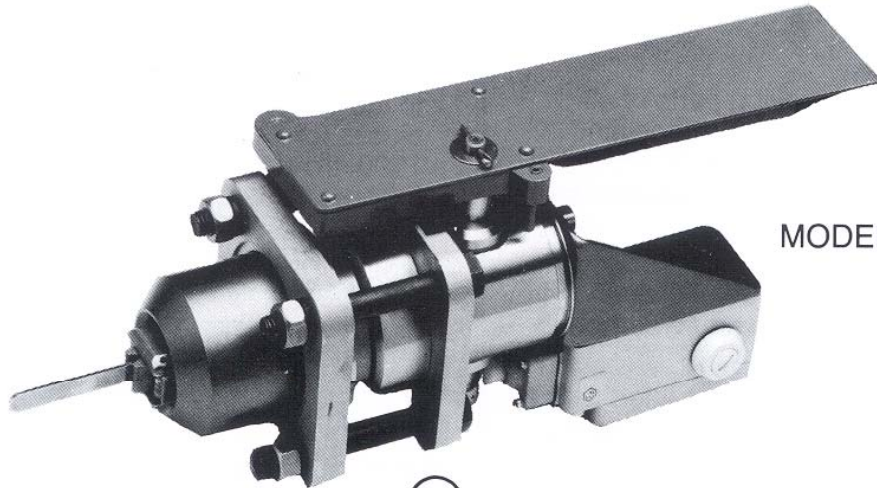
Models for installation on vertical pipe sections are available but must be specified.

Hi-T units are classified in two types to distinguish between those models which are not designed for removal while the line is under pressure and those models which are fitted with an integral valve and suitable for controlled removal when the pipeline cannot be de-pressurized.

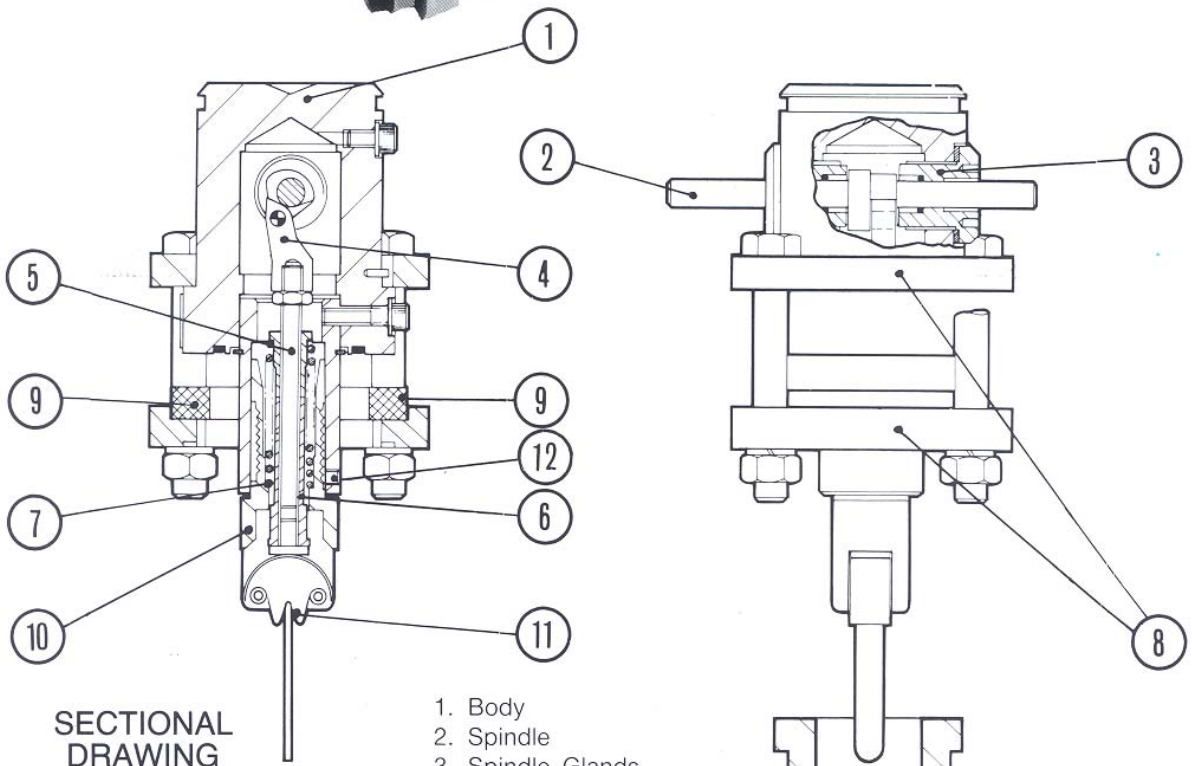


A simple jacking bracket tool is available for this purpose. Consisting of a safety screw mechanism and bridging clamps it facilitates the removal and re-installation of the Pigalert from the line under pressure in a matter of minutes.

Extended length Hi-T Pigalerts suitable for buried pipeline installations comprise standard models with the signalling devices mounted on top of a pressurized mast. Extensions, specified as the length from the top of the pipeline to the cross shaft spindle, are available in 8" (0.2m) increments to a maximum of 87" (2.2m).



MODEL ME-W

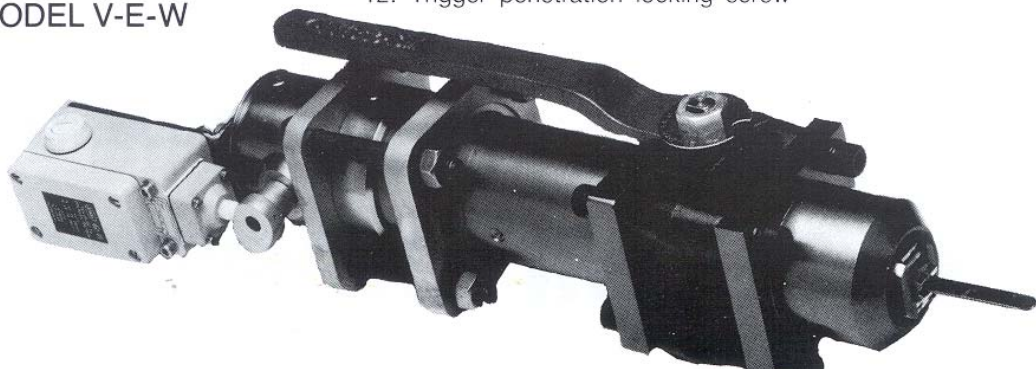


SECTIONAL DRAWING

WELDED BASE

1. Body
2. Spindle
3. Spindle Glands
4. Clevis
5. Pushrod
6. Adjusting mechanism
7. Spring
8. Top and Bottom Flanges
9. Half Rings
10. Trigger Carrier
11. Trigger Assembly
12. Trigger penetration locking screw

MODEL V-E-W



## Materials

The internal moving parts of all models together with the associated pressure housings are made from stainless steel to B.S. 316 S16 or the equivalent cast material in accordance with NACE Standard MR-01-75-91.

The standard ball valve fitted to the Hi-T Pigalert, suitable for the controlled removal of the signallers under pressure, comprises a forged carbon steel body, stainless steel ball and stem, renewable body seat rings and high-pressure body seals.

For use at extremely low temperatures, full stainless steel valves are an available option.

The standard base is made from BS 1503-224-490E-LT50-V or A350 LF2 carbon manganese steel and supplied with rust preventive protection to facilitate cleaning prior to welding.

All standard seals are made from Viton. Alternative seals materials are available.

Hi-T Pigalerts for line sizes 1½" to 2½" inclusive are constructed integral with a Tee for which a full range of material specifications is available.

The mechanical flag is finished with 1 coat electro-static epoxy baked at 350°F for 15 minutes. Color RAL 2000 GELB Orange gloss.

Honeywell electrical switch model No. LSX H4L and Stahl electrical switch model No. 8078 are available as standard fitments. A limited range of other switches including G070 Series proximity models can be supplied as optional extras.

## Hydrostatic Testing

All Hi-T pig signallers are hydrostatically tested to full code pressure requirement prior to shipment.

## Installation

The models are supplied as standard for mounting on a base to be welded to the line pipe or vessel. Extension pieces for flange mounting up to ANSI Class 2500 are also available.

All standard units require a 1½" (38mm) dia. access through both the mountings and the line pipe. Special adaptors and smaller diameter triggers are available for retro-fit applications.

Full instructions covering installation, re-setting, field adjustment for varying pipe-wall thicknesses and removal under pressure using a jacking bracket are supplied with all Hi-T Pigalerts as appropriate at the time of shipment.

## Model options and Codes are:-

- M = Mechanical Flag
- E = Electrical Switch
- F = Flange mounting
- R = Retro-fit (specify type/make of mounting)
- S = Tee fitting for sizes 1½" to 2½" pipeline
- W = Welded Base
- V = Valve Model
- X = Extension model (state length)

Standard combinations are:-

## Standard Models

M-W	E-W	ME-W
M-F	E-F	ME-F
M-R	E-R	ME-R
M-S	E-S	ME-S
M-W-X	E-W-X	ME-W-X
M-F-X	E-F-X	ME-F-X
M-R-X	E-R-X	ME-R-X

## Under Pressure Removal Models

All the above models can be supplied suitable for removal under line pressure. The code reference is prefixed with V to denote the valve models.

V-M-W	V-E-W	V-ME-W
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Our policy is one of continuous development. Girard Industries reserves the right to alter specifications without prior notice. All equipment is sold subject to the company's terms and conditions of sale.

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**GIRARD**



**GIRARD INDUSTRIES**

6531 North Eldridge Parkway  
Houston, Texas  
77041-3507  
Tel (713) 466-3100

Fax (713) 466-8050  
US (800) 231-2861  
Email: email@girardind.com  
Website: www.girardind.com