

# Clark•Reliance®

## BOIL-OUT GAGES PRACTICE AND POLICY

On new boiler installations it is common procedure initially to operate the boiler at a reduced pressure for a short time in order to cook out foreign materials (pipe joint compound, grease oil, flux, etc.) that remain in the drum or other pressurized parts of the system after the boiler has been constructed. During this boil-out period most of the suspended or dissolved debris is flushed out with blowdown discharges. However, a small amount of residue is unavoidably deposited as a film on all internal, wetted surfaces. ... including those of the water level gage. This type of scum layer is nearly impossible to remove by blowing down the gage, particularly if the gage glasses are protected by mica shields, as they must be, in high pressure installations.

As a practical matter, it is more expedient to employ an inexpensive temporary level gage (which can be discarded or returned after the boil-out procedure), rather than to use and then rebuild the gage intended for regular service. For boil-out purposes on new water columns and direct-to-drum gage assemblies, Clark-Reliance

provides temporary level gage at no charge or at a refundable charge under one of the following conditions:

1. When a Prismatic gage, flat glass gage or Simpliport gage, having 3/4" diameter end nipples, is supplied as part of a water column or direct-to-drum assembly, we automatically furnish for temporary boil-out service the following parts at no charge:
  - 1 pc. — 3/4" OD tubular gage glass of proper length
  - 2 pc. — Rubber packing rings (\*)
  - 1 pc. — Low visibility tubular shield (so that low vision level in the tubular gage is same as in the gage that will be used for regular service).

At the conclusion of the boil-out procedure all of the above parts should be discarded. When the gage having stainless steel nipples is then installed, it is essential that the appropriate (non-rubber) packing rings are used, to assure durable sealing of the stainless steel nipples.

2. When a gage having flanged connections is supplied as part of a water column or direct-to-drum assembly, and the boil-out pressure will not exceed 200 PSIG, we will furnish the following parts at no charge:

- 1 set — VB-991 gage valves with 1/2" NPT conn.

- 1 pc. — 5/8" OD tubular gage glass of proper length

- 1 pc.— Low visibility shield

The boil-out gage valves should be temporarily installed in the 1/2" NPT "Test" connections in the flanges of the regular water gage shut-off valves, which are on the water column or direct-to-drum assembly. This equipment may be discarded after the boil-out has been completed.

3. On installations like the above but where boil-out pressures will exceed 200 PSIG, the following are recommended for temporary service:

- 1 set — RV1-113 gage valves with 1/2" NPT conn.

- 1 pc.— RLR-110 reflex gage of proper visibility (t \* =No. of sections and size of each)

The cost of this assembly will be listed separately on our order invoice. However, full credit will be issued upon its return to Clark-Reliance.

\* Bronze valves are supplied with rubber packing rings. These are to be used for the boil-out procedure. Steel valves are supplied with packing cartridges and separate rubber packing rings (to be used for boil-out).

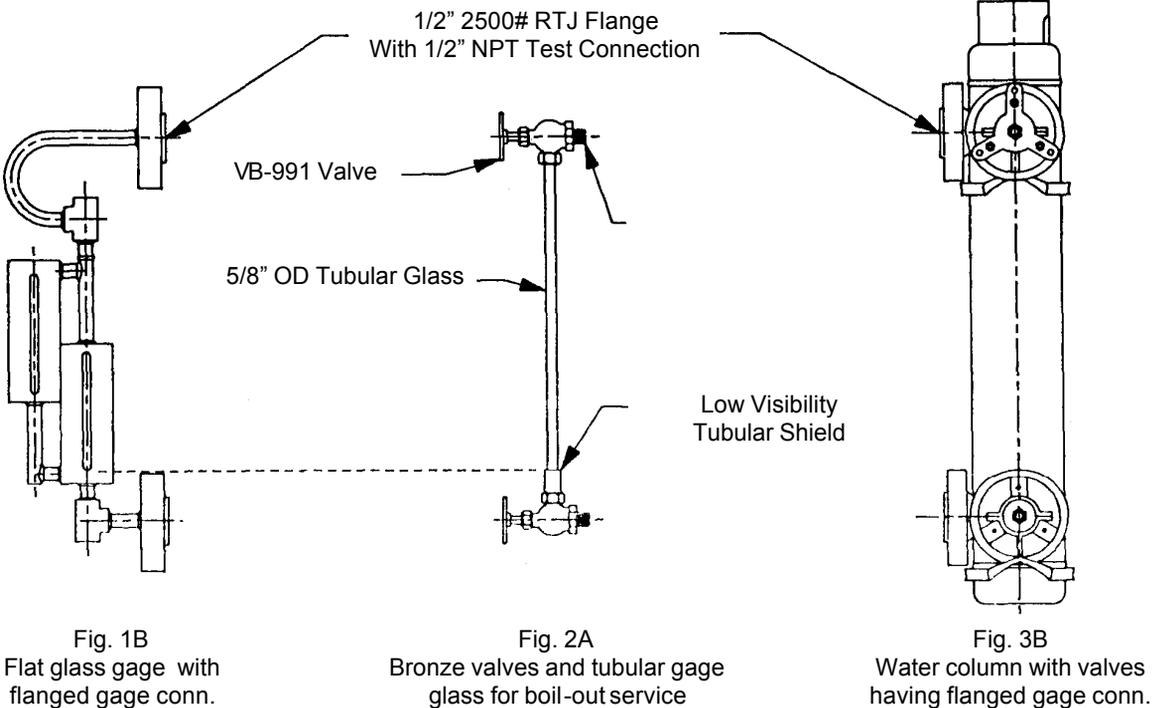
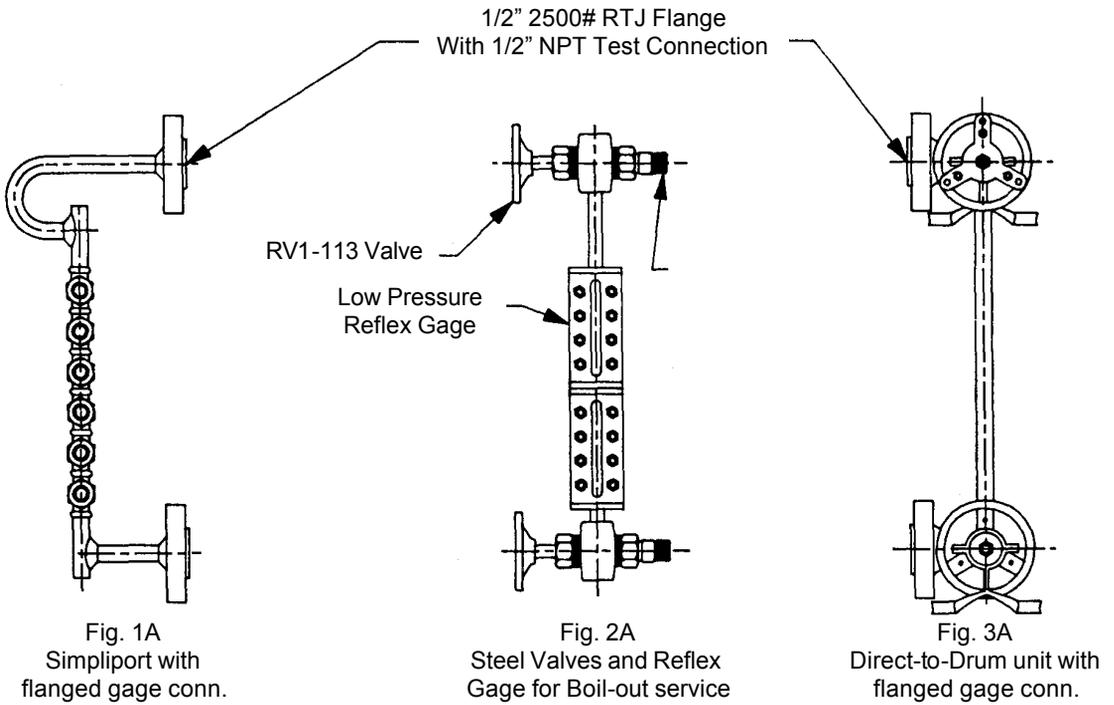
*For additional information  
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# Clark•Reliance®

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Illustrations that show how Boil-out gage assemblies are to be used on water columns or Direct-to Drum Units having flanged gage connections.

The boil-out gage per Fig. 2A or 2B should be temporarily installed on the gage valves flanges per Fig. 3A or 3B, until the boil-out procedure is finished. Then the flanged gage per Fig. 1A or 1B should be installed for regular service.



## Notice to Plant Operators

The use of non-Original Equipment Manufacturer parts (such as glass, gaskets, probes, modules, etc.) will void the Agency Approval (FM, UL, CSA, CRN, ABS, etc.), pressure/temperature rating, and warranty of this equipment. Clark-Reliance requires the use of OEM parts for all repairs on this product in order to maintain plant and personnel safety, and reliable operation.

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Steel Valve Repair Kit



Replacement Probes



Gage Glass Repair Kit



Simpliport Module



Simpliport Packing Nut



Replacement Relays



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Bronze Valve Repair Kit



Valve Packing



Replacement Floats