Conversion of Gammon Gauges to add Push Button Tester and Peak Hold features using Model GTP-552-40 Retrofit Kit

Revised 08-20-08

Description

GTP-552-40 series retrofit kits are designed to add the Peak Hold and Push Button features to any existing Gammon Gauge.

Installation

1. Disconnect the upper and lower tubing connections from the existing Gammon Gauge. With the gauge on a clean working surface, remove the two scale screws (17) and the 8 attachment screws (18) that connect the upper and lower flanges to the cage. See Views 1 and 2 – photos, (refer to Instruction 6374 Rev. 3).

2. While holding the cage with one hand, carefully pull downward on the lower flange, rotating it slightly to remove the parts shown in view 3 (glass tube,piston, spring and lower flange).

3. Using fuel resistant gloves, clean the glass cylinder and piston using a Scotch Brite pad (small piece included in the kit) and jet fuel. Wipe dry with a clean cloth. While holding the tube horizontally with the piston inside, the piston will slide freely as you tilt the tube back and forth if these parts are actually clean.

4. To remove the piston rod/disc assembly (9 and16) from the new lower flange, rotate the reset knob (8) about l/4 turn, and pull the rod out.

5. Insert the piston rod (9) through the spring (23) and into the lower flange. Press the piston disc (16) lightly to insure that it is seated in the lower flange. Place the piston over the piston disc and spring.

6. Coat the o-rings on the existing upper flange and new lower flange with a film of Vaseline or plug valve grease. Use new Viton o-rings (GTP-2200-023V). Install the nylon washer (24), as in view 6, on the new lower flange and on the existing upper flange. Install the glass cylinder on the upper flange using a slight rotating motion as you push. Be careful not to cut the o-ring or chip the glass cylinder. We include a spare o-ring.

7. Place the cage on the upper flange and secure it with four screws (18). Be sure that the scale attachment pad and screw hole on the flange faces outward.

8. The assembly of the piston, spring and new lower flange can now be inserted with the piston entering the glass tube. Carefully push the lower flange so that the o-ring will enter the glass tube, but as you push, a slight rotating motion should be used to keep the glass tube from rotating. Use your thumb placed near the top of the glass tube to keep it from rotating as you push the lower flange into position. Insure that the scale attachment pad with screw hole is facing outward. Install the 4 screws (18) to secure the lower flange to the cage. The UV shield (plastic film) and the graduated scale can now be installed using the two scale screws (17).

   NOTE: When installing the 8 screws (18) and the 2 scale screws (17), it is advisable to use blue LOCTITE. (included in the kit)

9. Remount the completed gauge assembly and reconnect the up and downstream tubing fittings. Refer to paragraph C for instructions regarding connection of the Vent Port from the Push Button tester.

10. For Gammon Gauges that are older than October, 2004, it is necessary to install an orifice tube (26). See the date stamped on the cage flange. If there is no date on the cage, the orifice tube is required.

11. Remove the bleeder plug (10) from the upper flange of the Gammon Gauge. Refer to Instruction 6374, Rev. 3. Remove the filter element (1) by pulling it straight upward. This can be done by prying upward through the high-pressure connection port, or more easily by using a hook bent on the end of a wire (such as a heavy paperclip). Because the filter may be damaged during removal we supply a replacement in the kit. Coat the orifice tube o-ring (21) the filter o-ring and the bleeder plug o-ring with a film of Vaseline or plug valve grease. Insert the orifice tube (26) into the bottom of the upper flange by pushing downward. This is a tight fit to ensure it remains in place. You may have to push it down with a blunt ended tool. Insert the filter element by pushing downward. Reinstall the bleeder plug.

OPERATING INSTRUCTIONS

A. The Peak Hold feature allows the operator to read the maximum differential pressure that occurred during a flow period.
If the operator wants to read the current differential pressure at the time he is looking at the gauge, it is necessary only to turn the Reset Knob (8), counterclockwise ¼ turn as in view 7. The piston will be released instantly and will automatically move to the existing differential pressure. Once the Reset Knob is released, the piston will move to the current differential pressure and will then lock on to the next maximum differential pressure.
NOTE: The Reset Knob should be operated at the beginning of a fueling operation on a vehicle or loading stand. In hydrant systems, it should be reset after the existing reading has been recorded.

B. The Three Way Valve is used to perform a periodic test in accordance with API-1581 to check the action of the piston in the glass cylinder. By pressing and holding the knob, the cavity under the piston is vented to the vent port by blocking pressure from the downstream sense port. Upstream pressure forces the piston downward as fuel is displaced through the vent port. The operator is to observe the action of the piston to see that it does not move erratically, an indication that the piston and glass cylinder should be cleaned using Scotch Brite.

C. The Vent Port has a second function as a thermal pressure relief valve, to protect the glass cylinder if gauge line valves are left in a closed position. Be sure to connect the outlet of the Vent Port to your storage tank, a slop system or to a waste line, such as from the air eliminator.

D. See our web site for at www.gammontech.com for servicing and seal replacement instructions.

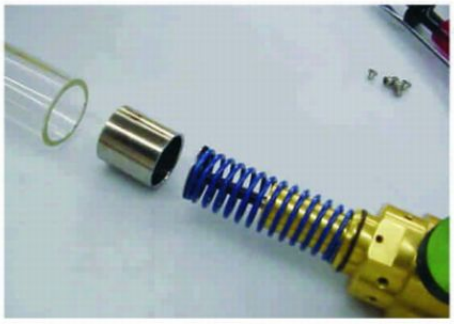
GAMMON TECHNICAL PRODUCTS, INC.
P.O. BOX 400 2300 HWY 34
MANASQUAN, NJ 08736
PHONE 732-223-4600
FAX 732-223-5778
EMAIL gammontech@gammontech.com

View 1

View 2

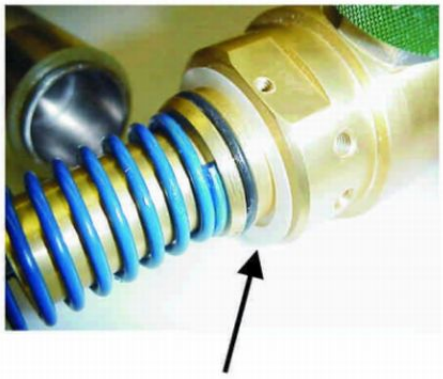
View 3

View 4



View 5

View 6



View 7

Gammon Technical Products
Conversion of Standard
Gammon Gauge
For Peak Hold Feature