

# Healy Model 8701VV Breakaway

**HEALY STAGE II VAPOR RECOVERY  
PART NO. 8701VV BREAKAWAY (HOSE BREAK)  
ASSEMBLY & INSTALLATION INSTRUCTIONS**

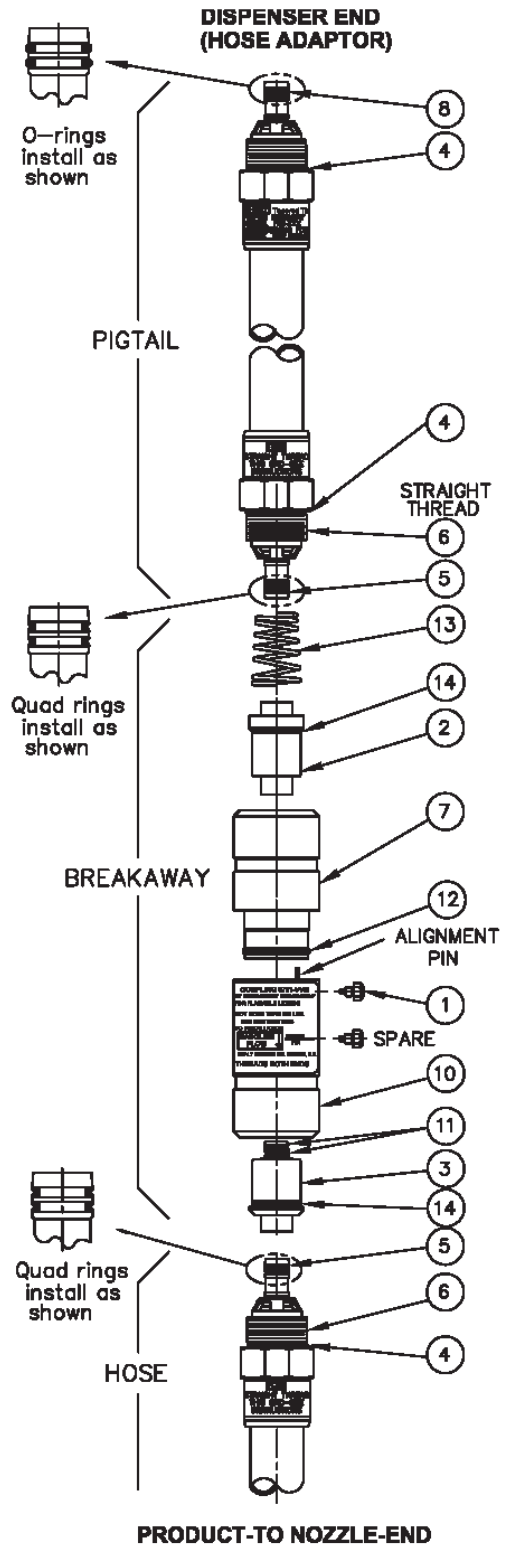
- The Healy Breakaway is delivered loosely assembled. Handle carefully to avoid dropping and/or losing the precision parts.
- Failure to remove the Shear screw (Item 1) as described in Step 1 below could result in fracturing or shearing of the screw. The Shear screw will require replacement if damaged.
- Be sure to assemble parts in the exact sequence as shown below.
- Be sure to lubricate all o-rings and quad seals where indicated. Use of ordinary motor oil is sufficient.
- Do not use thread-sealing compounds on straight threads.

**ASSEMBLY INSTRUCTIONS**  
(refer to diagram at right)

1. Remove the Shear Screw (Item 1) and the packing materials. Separate the halves of the breakaway assembly, retaining the loose internal valves, (Items 2 & 3) and the spring (Item 13) inside the upper half.
2. Select the pigtail, (whip hose) assembly. Lubricate the quad and o-ring seals (Items 4, 5, 8, & straight thread, Item 6). Assemble the pigtail to the input half of the Breakaway (Item 7) being sure that the larger end of the conical spring is centered in the groove on the white valve. Tighten hose to Breakaway at 35 to 70 foot pounds. Be sure the vapor tube fitting slides easily into item 2 before final tightening.
3. Select the delivery hose, lubricate the o-ring (Item 4), the quad seal (Item 5) and straight thread (Item 6). Assemble the end with the quad seal to the output half of the Breakaway (Item 10), install the secondary hose and tighten to 35 to 70 foot pounds. Be sure the vapor tube fitting slides easily into item 3 before final tightening.
4. Carefully fit both halves of the Breakaway together. Utilizing the alignment pin, fully compress both halves and insert the Shear Screw (Item 1) and hand tighten. Final tighten to 20 inch pounds. Tools should not be necessary to initially start the screws.

14	2	1-117	O-RING, PRECISION #8727	708
13	1	A8701-752	SPRING, CONICAL	752
12	1	1-122	O-RING, PRECISION #8727	709
11	2	78-312	O-RING, PRECISION #8727	75414
10	1	CB701-750-2	BODY, NOZZLE END	750-2
8	2	1-012	O-RING, PRECISION #5747	291
7	1	CB701-748	BODY, DISPENSER END	748
6	2		HOSE FITTING	
5	4	4012	QUAD-RING S14GJ	HB4
4	4	1-025	O-RING, PRECISION #5747	HB2
3	1	BB701-781	VALVE, NOZZLE END	781
2	1	BB701-748	VALVE, DISPENSER END	748
1	2	BB701-716	SHEAR, SCR.	787
ITEM NO.	QTY	DWG NO.	DESCRIPTION	P/N

LIST OF MATERIAL



## DRIVE-OFF BREAKAWAY RECONNECTION PROCEDURE

Use this procedure to either reconnect or disconnect (reverse order) the Healy 8701VV Breakaway as part of Section 1.4 Procedure for Reconnecting Breakaway and Testing Fueling Point after Drive-Off in the Assist Systems Scheduled Maintenance.

**NOTE: Breakaway Reconnections must be logged in the GDF Maintenance Log.**

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### Reconnection Procedure Option

I. HEALY BREAKAWAY RECONNECTION CLAMP .....	1
II. EASYGRIP RECONNECTION TOOL .....	3

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## I. HEALY BREAKAWAY RECONNECTION CLAMP

### TOOLS NEEDED:

- Healy Breakaway Reconnection Clamp, Part No. 795
- 8mm Hex Head Socket
- Torque wrench
- Safety glasses

### RECONNECTION PROCEDURE

1. Inspect each half of the separated breakaway for obvious damage to the outer-shell, plastic inserts or o-rings; including cracks, chips or tears that may effect reconnecting the two halves.
2. Check the shear pin bushing hole (see Figure 2) located in the top half of the breakaway for any part of the pin left behind at separation. A gentle tap on the opposite side of the breakaway should eject the pin.
3. After completing inspection, lightly lubricate the main o-ring on the top half of the breakaway. Any weight motor oil is acceptable.
4. Slide the top clamp of the Breakaway Reconnection Clamp onto the two flat surfaces on the top half of the breakaway (See Figure 1) installed on the dispenser (attached to whip hose).
5. Slide the separated bottom half of the breakaway (with hose and nozzle attached) onto the bottom clamp of the Breakaway Reconnection Clamp and begin squeezing the grip to slowly bring the two halves together. Check the main o-ring for position as the top and bottom of the breakaway come together.
6. Align the dowel pin in the bottom half of the breakaway with the dowel pin guide located in the

top half of the breakaway. When dowel pin and guide are aligned, continue squeezing tool grip until the breakaway halves join together.

**CAUTION:** Reconnection can cause a small amount of gasoline to leak out of the breakaway. A towel wrapped loosely around the breakaway can help to minimize fuel spills.

7. Remove the shear pin (#787) located in the spare shear pin location of the breakaway and install in place of the original.
8. Torque the shear pin to 20 inch-pounds (~ 1.5 ft-lbs). **DO NOT OVER-TIGHTEN.**
9. If available, install a shear pin (#787) in the spare shear pin location.
10. Remove the Breakaway Reconnection Clamp.
11. Proceed with the tests outlined in Section 1.4 of the Healy Systems Scheduled Maintenance.

Figure 1

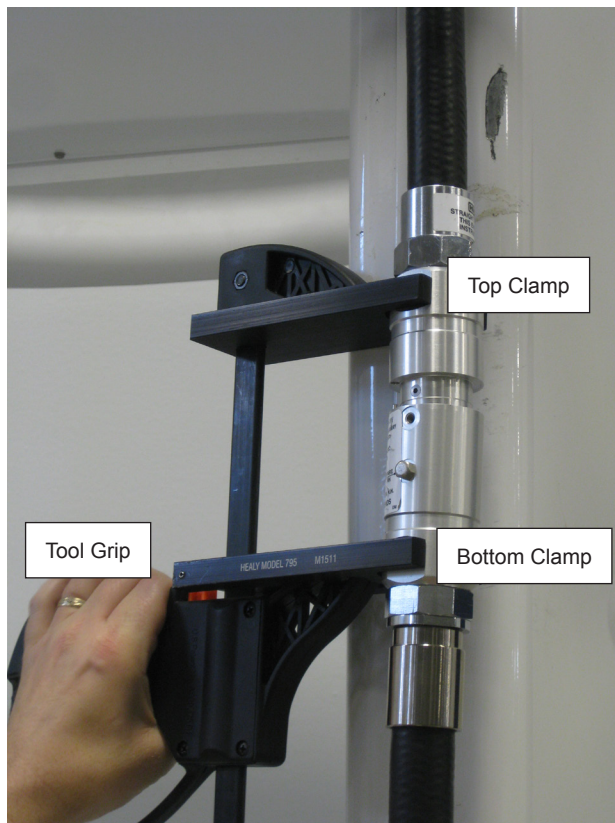


Figure 2



Franklin Fueling Systems  
3760 Marsh Road  
Madison, Wisconsin 53718 USA  
ARB Approved Installation, Operation and Maintenance Manual

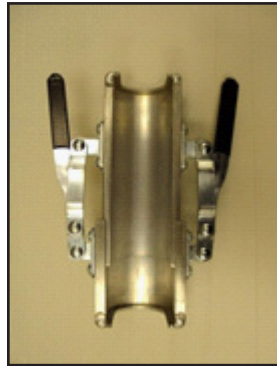
Website: <http://www.franklinfueling.com>  
Email: [sales@franklinfueling.com](mailto:sales@franklinfueling.com)  
Telephone: 800-225-9787  
Fax: 608-838-6433



## II. EASYGRIP BREAKAWAY RECONNECTION CLAMP

### TOOLS NEEDED:

- EasyGrip Reconnection Clamp



- 8 mm Hex Head Socket
- Torque wrench
- Safety Glasses

### RECONNECTION PROCEDURE

**NOTE:** Additional information on the EasyGrip operation can be found by viewing a video clip on their website at <http://www.simplegrip123.com/>

1. Inspect each half of the separated breakaway for obvious damage to the outer-shell, plastic inserts or o-rings; including cracks, chips or tears that may effect reconnecting the two halves.
2. Check the shear pin bushing hole, (See Figure 1) located in the top half of the breakaway for any part of the pin left behind at separation. A gentle tap on the opposite side of the breakaway should eject the pin.



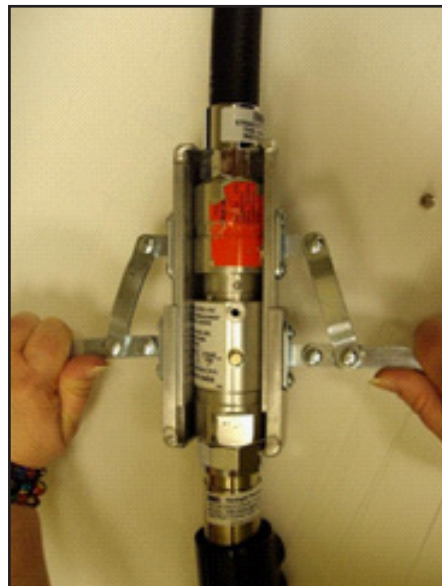
**Figure 1**

3. After completing inspection, lightly lubricate the main o-ring on the top half of the breakaway (See Figure 1). Any weight motor oil is acceptable.
4. With the EasyGrip in its full open position, place the top portion of the breakaway into the top side of the EasyGrip and the bottom portion of the breakaway into the bottom side (See Figure 2).



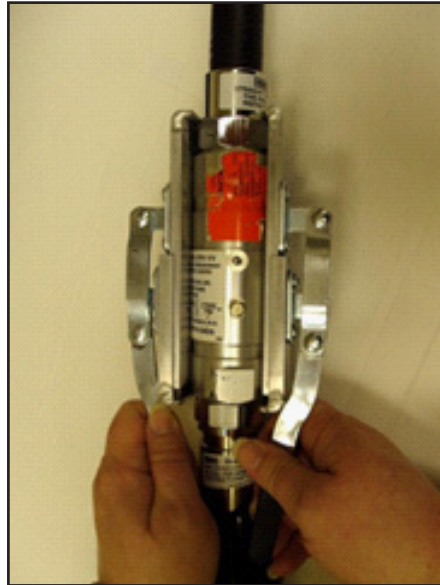
**Figure 2**

5. Pull the two handles of the Easy Grip down at the same rate to slowly bring the two halves together. Check the main o-ring for position as the top and bottom of the breakaway come together. See Figure 3.



**Figure 3**

- Align the dowel pin in the bottom half of the breakaway with the dowel pin guide located in the top half of the breakaway. When the dowel pin and guide are aligned, continue squeezing tool grips until the breakaway halves come together. See Figure 4



**Figure 4**

**CAUTION:** Reconnection can cause a small amount of gasoline to leak out of the breakaway. A towel placed in front of the reconnection zone of the breakaway can help to minimize fuel spills.

- Remove the shear pin (#787) located in the spare shear pin location of the breakaway and install in place of the original. See Figure 5



**Figure 5**

8. Torque the shear pin to 20 inch-pounds (~ 1.5 ft-lbs).  
DO NOT OVER-TIGHTEN
9. If available, install a shear pin (#787) in the spare shear pin location.
10. Remove the Easygrip.
11. Proceed with the tests outlined in Section 1.4 of the Healy Systems Scheduled Maintenance.