



Recommended Instructions Installation, Maintenance, Inspection

CATLOW CTMCA Breakaway

577014-071
DATE 03/2016

VERY IMPORTANT READ THIS BEFORE INSTALLING YOUR BREAKAWAY



WARNING: USE ONLY ON SYSTEMS RATED AT 50 PSI MAXIMUM
USE ON SYSTEMS HAVING HIGHER STATIC PRESSURE MAY CAUSE PREMATURE SEPARATION

ALWAYS CHECK FOR ELECTRICAL CONTINUITY FOLLOWING PETROLEUM EQUIPMENT INSTITUTE (PEI) RECOMMENDED TEST PROCEDURE (PEI/RP400-02)

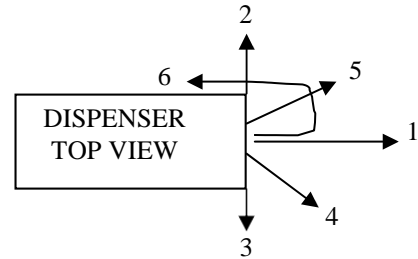
PRIOR TO INSTALLATION: Refer to the model of breakaway for the maximum pull force before you proceed with the instructions

Caution must be used when testing to prevent damage to the dispenser or personal injury.

ALL DISPENSERS MUST BE BOLTED TO THE ISLAND. (NFPA 30A 6.3.4 and PEI/RP500-11 2.2)

CONFIRM DISPENSER IS SECURE.

- Attach a spring scale to the dispenser where the breakaway will be installed.
- Apply a 350 lbs pull force at various angles and check the emergency valves, Dispenser and hose assembly. (UL STANDARD 567)
- Release the load and complete the installation of the breakaway.



CTMCA INSTALLATION KIT - P/N 4037

Qty.	P/N	Description
1 ea.	CTMCA	Cam Twist Magnetic Breakaway
2 ea.	M3418	CTMCA Hose Adapter

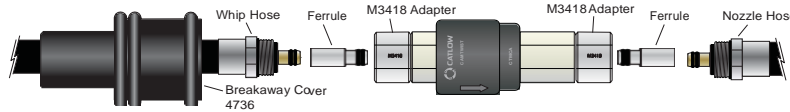
INSTALLATION NOTES

- The CATLOW in-line breakaway must always be installed between two hose sections (example: whip & main hose)
- On side hose connections install the breakaway between the nozzle and the hose retractor (NFPA 30A 6.5.3)
DO NOT INSTALL THE BREAKAWAY ON THE DISPENSER SIDE OF THE HOSE RETRACTOR
- On an overhead hose connection, install the short section of whip hose then the breakaway, hose and nozzle

INSTALLATION INSTRUCTIONS FOR THE CTMCA BREAKAWAY

NOTE: Catlow recommends using a swivel end hose in proximity to the CAM TWIST

1. Isolate/turn the dispenser OFF and relieve the line pressure from the system by opening the nozzle and allowing the system to drain into an approved metal container.
2. Observe the flow direction arrow on the breakaway and install with the flow arrows pointing toward the nozzle.
3. Use thread sealant recommended by UL for petroleum products on pipe thread connections.
4. Use oil or grease on straight or metric thread o-ring fittings - **DO NOT USE TEFLON TAPE.**
5. When replacing the CTMCAs with M3418 adapters on both ends, there are special precautions that must be observed. When replacing CTMCA, ensure the M3418 ferrule stays with each hose and does not get discarded along with the discarded CTMCA.



6. Re-attach the hose to the M3418 adapter and tighten to 50 ft-lbs torque. **CAUTION: Torque adjacent parts only (e.g., hose and adapter to which it connects).** Slide plastic cover 4736 over the breakaway as far as it will go (for retrofit instructions see page 2).
7. Activate/turn the dispenser ON and purge the hoses and nozzles of air into an approved metal container.
8. Check the system for leaks, replace any item that exhibits signs of leakage.



Use Only UL Listed
Paste Type Thread
Sealant



Hoses should not be long enough that a vehicle could drive over the hose resulting in a direct pull on the retractor cable or dispenser and bypass the breakaway



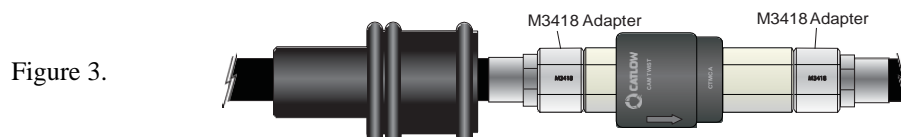
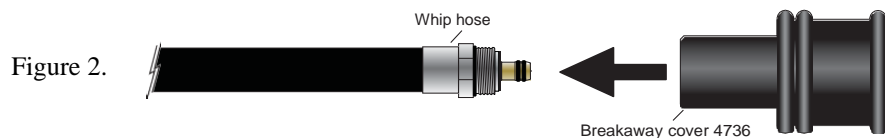
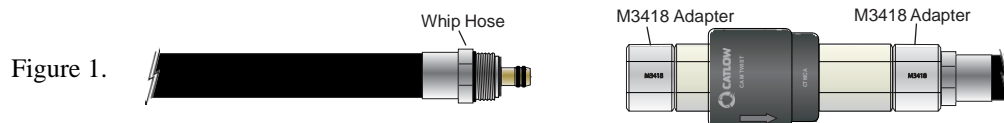
Always Refer To Your
Local City, State Or Federal
Testing Regulations

CAM TWIST MAGNETIC BREAKAWAY
Model: CTMCA
IF SEPARATION OCCURS

1. Isolate/turn off dispenser, relieve line pressure from the whip hose and the nozzle hose. Drain fuel into an approved metal container.
2. Inspect the entire system for damage and/or leaks. Replace any damaged components in the system (*PEI/RP500-11 9.2.2*).
3. **Clean the magnet surfaces** on both the male and female couplings and inspect for damage.
4. Replace damaged o-rings using CATLOW repair kit.
Lubricate the o-rings and the mating male and female surfaces with oil or grease.
- 4a On Model CTMCA, O-rings must be replaced using CATLOW repair kit P.N.#2977.
5. Align the flow arrows and push the halves together engaging the coupling mechanism until a noticeable snap is felt and the etched guide mark above the letters CTMCA on the nozzle half of the breakaway is not visible (see illustrations on page 3).
6. Test the reconnection by pulling on the hose just below the breakaway.
7. Activate/turn on the dispenser and purge the hose and nozzle of air into an approved metal container.
8. With the system pressurized, check for leaks around the breakaway, nozzle, both hoses and all joints.
9. Replace any item that exhibit signs of leakage.

RETROFITTING PLASTIC COVER 4736 ONTO BREAKAWAY

1. Disassemble the whip hose from the breakaway (see Figure 1 below). NOTE: After disconnecting the whip hose from a CTMCA with M3418 adapters, ensure the ferrule does not get discarded (if it should come out of the breakaway when the hose is disconnected). Refer to the illustration in Step 5 of the **INSTALLATION INSTRUCTIONS FOR THE CTMCA BREAKAWAY** on page 1.
2. Slide breakaway cover 4736 onto the whip hose (see Figure 2 below).
3. Re-attach the hose to the M3418 adapter and tighten to 50 ft-lbs torque (see Figure 3 below). **CAUTION: Torque adjacent parts only (e.g., hose and adapter to which it connects).**
4. Slide down the cover onto the breakaway as far as it will go (see Figure 4 below).



Isolate fuel pressure/flow from the system. If dispenser is off and depressurized, o-rings can be safely replaced WITHOUT draining the hose assembly. Always lubricate o-rings before installing and reconnecting. An o-ring pick or small stiff wire will be useful to remove old o-rings.

CTMCA O-RING REPLACEMENT

The CTMCA has four (4) O-rings that can be serviced or replaced in the field. These are used to seal liquid (Qty. 2), vapor (Qty. 1) and dirt (Qty. 1). **To Replace these O-rings use CATLOW PN #2977.**



SEPARATES IN ONE DIRECTION ONLY

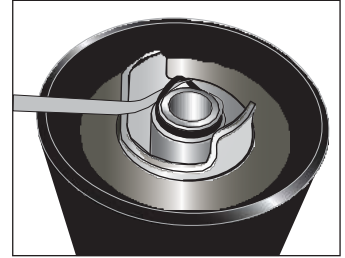
Use two open end wrenches and apply in a clockwise rotary torque



When the two halves of the breakaway are correctly connected, the guide mark (see adjacent Dirt and Liquid drawings to the right) etched above the letters CTMCA on the nozzle half of the breakaway will not be visible.

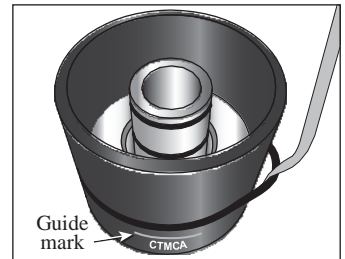
VAPOR VAPOR VAPOR VAPOR

The Vapor o-ring is the smallest o-ring in the repair kit. It is located in the upper section of the breakaway. This will need to be replaced if meter creep is observed.



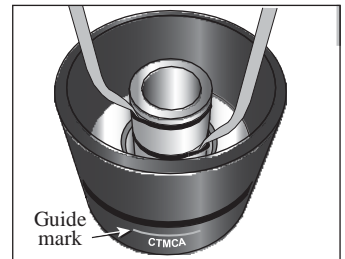
DIRT DIRT DIRT DIRT

The largest o-ring is used to keep dirt out of the nylon covers and breakaway assembly. Replace if missing or damaged.



LIQUID LIQUID LIQUID LIQUID

Occasionally during a drive-off or reconnection, the liquid o-ring gets pinched or cut. If a breakaway leaks after reconnection, replace the liquid o-ring. Reach inside the lower section of the breakaway, squeeze the o-ring and remove it.



ALWAYS LUBRICATE WITH OIL OR GREASE BEFORE RECONNECTION



REPAIR KIT

PN	DESCRIPTION
2977	Repair Kit CTMCA



EQUIPMENT WARRANTY

Veeder-Root warrants that this product shall be free from defects in material and workmanship and is compliant with all applicable performance standards and specifications for which it has been certified, for a period of one (1) year from date of installation when proof of the date of install is provided. Or fifteen (15) months from date of manufacture (see terms below) when proof of date of installation is not provided.

Date of manufacture: _____

*Product S/N: _____

*Date of installation: _____

*Technician number: _____

Required Information**Installation Address:**

Street: _____

City: _____ State: _____

Phone: _____ - _____ - _____

This component was tested at the time of manufacture and meets all the applicable performance standards and specification to which it was certified: E.O. VR-201 and VR-202.

For detailed warranty terms see EO warranty exhibits (VR-201/VR-202 Exhibit 6) on the ARB Web site at:
<http://www.arb.ca.gov/vapor/eo-evrphasell.htm>