

INSTRUCTIONS
The COOLANT DAM® by ARCTIC FOX
READ INSTRUCTIONS BEFORE USING COOLANT DAM

Uses shop air to retain coolant in system during minor repairs (block openings up to 3/4" diameter), then pressure checks the repair.
 Simple to use. Just install a male quick coupler fitting into the 1/4" NPT inlet port on the RED flow control valve. Also attach the 3/4" discharge hose to the exhaust port barbed fitting on the blue valve.
 Your COOLANT DAM is now ready to use.

- TO RETAIN COOLANT in system when removing heater hoses, coolant sensors, small pipe plugs, etc., use the following procedure:
1. Remove radiator cap.
 2. Install COOLANT DAM on radiator neck, using appropriate adapter (s). Route discharge hose into an open container to collect any minor amount of coolant expelled. **IMPORTANT: Secure hose to container or fixed object with the attached spring clip.**
 3. Be sure self-locking radiator cap provided in kit is securely in place and locked onto top of COOLANT DAM.
 4. Close RED flow control valve (position handle perpendicular to valve body).
 5. Open BLUE pressure gate valve (position handle parallel to valve body).
 6. Attach shop air hose to quick coupler on RED flow control valve. Open RED flow control valve slowly until the maximum negative pressure reading is attained. You are now able to proceed with the repair. Once repair is completed, close the RED flow control valve (again position handle perpendicular to valve body).

NOTE: The recommended air supply for the COOLANT DAM is 30CFM air @ 120-150 PSI for most applications; therefore, use minimum 3/8" I.D. air hose not over 25 feet in length. Your shop may not have continuous 30 CFM available; however, most compressors will allow the unit to hold coolant long enough to perform many simple repairs. If adequate air supply is not available, you may have to install a temporary plug or cap over block access, then reinstall repaired or replacement component once the shop air compressor has built backup to 150 PSI. To conserve shop air, it is recommended that the COOLANT DAM not be left in the "retain coolant" mode for more than 1 minute and never be left unattended.

- TO PRESSURE TEST the system once repair is completed, follow this procedure.
1. Close both the RED flow control valve and the BLUE pressure gate valve (handles must be perpendicular to the valve body).
 2. Now open the RED flow control valve slowly until a positive pressure reading equal to normal system pressure is attained. If the valve is inadvertently opened too far, the radiator cap on top of the COOLANT DAM will simply exhaust excess air.
 NOTE: The locking radiator cap provided with the tester will exhaust at approximately 17 PSI. Optional locking pressure caps are available from Arctic Fox.

CAUTION: Self-locking radiator cap is provided with the COOLANT DAM to be used as the pressure regulator. To avoid possibility of personal injury, cap must be properly installed with lock tabs fully engaged against stops on COOLANT DAM body. Never use COOLANT DAM on systems which exceed 100° Fahrenheit (38° C)

“COOLANT DAM”®
Pressure Tester
 Operational Instructions
 And Parts List

WARNING

Secure 7-foot discharge hose to container with attached spring clip before using COOLANT DAM.

To avoid possibility of personal injury, cap must be properly installed with lock tabs fully engaged against stops on COOLANT DAM body.

Never use COOLANT DAM on systems which exceed 100° Fahrenheit (38°C).

ARCTIC FOX
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Item	Qty.	Description	Part #
1	1	Hanger Wire	A-483
2	1	Radiator Cap-Locking, 13 Pound	A-463
	1	Radiator Cap-Locking, 20 Pound	A-6336
3	1	1/2" Ball Valve (Blue Handle)	A-461-B
	1	1/2" Ball Valve (Red Handle)	A-461-R
4	1	1/4" 90 Degree Street Elbow	A-242
5	1	1/2" x 1/4" Steel Pipe Bushing	A-470
6	1	Pressure / Vacuum Gauge	A-460
7	1	COOLANT DAM Pressure Tester Housing	A-450
8	1	1/4" Extension hose (Includes 13, 14, 15, 16)	A-462-2
9	1	Head Kit	T-1025
10	1	Nozzle	A-477
11	1	1/4" x 1/8" Steel Pipe Bushing	A-472
12	1	1/8" BST Male Coupler	A-482
13	2	1/8" BST Female Nipple	A-481
14	2	1/4" x 1/8" Push on Hose End	A-462-3
15	1	1/2" O.D. x 14" (356mm) Long Hose	A-462-4
16	1	1/8" BST Female Coupler	A-480
18	1	3/4" Hose barb to 1/2" Male Pipe	A-652
19	1	Uni-Clamp	A-476
20	1	3/4" I.D. x 7' (2m) Long Discharge Hose	A-536
21	1	#8-32 KEPS Shake proof Nut	A-486
22	1	Spring Clip	A-485
23	1	Hose Band	A-484
24	1	#8-32 x 1/2" (13mm) Long Machine Screw	A-487

TO TEST POP-OFF PRESSURE OF RADIATOR CAP (Requires T-1034 Adapter):

1. Remove radiator adapter from quick coupler on bottom of Coolant Dam[®] and plug coupler with brass plug chained to T-1034 adapter.
2. Install cap to be tested on top neck of Coolant Dam[®]. Standard automotive size radiator caps will attached directly to the Coolant Dam[®] neck. If testing a Truck "B" size cap, first attach the T-1034 adapter, then install the cap onto the adapter.
3. Close both the **RED** flow control valve and the **BLUE** pressure gate valve (position handles perpendicular to respective valve bodies).
4. Attach air supply hose.
5. Slowly open the **RED** valve until air relieves from the Coolant Dam[®] exhaust ports.
6. Close the **RED** valve, wait 10 to 20 seconds, then read pressure gauge to determine pop-off pressure of cap.

"COOLANT DAM"[®] PRESSURE TESTER AVAILABLE ADAPTERS & PLUGS



T-1010
Mack Midliner
Fits vehicles using Mack part number 5516031410 radiator cap.



T-1025
Standard Automotive Size
Reversible seal fits 1" or 3/4" deep filler necks. Also fits late model Mercedes 1319.



T-1020
Volvo
Fits vehicles using Volvo part number 1542591 radiator cap. (46x33mm Thread).



T-1024
Truck "B" Size



T-1034
Pop Off Pressure Adapter
Mounts to top of Coolant Dam[®] to test pop off pressure of truck "B" size cap.



T-1029
GMC-Freightliner-Western Star
Threaded, Non-Vented, Western Star cap part number 20009-0002.



T-1030
Transit Bus Adapter
Fits many Flexible, Crown, MCI, New Flyer, GM, MAN, SAAB filler necks.



T-1228
Ford E-350 International 7.3L
Fits vehicles using Cap # RS-103, F6DZ-8100A, 12R-16#, or 31406.



T-1040
Volvo
Fits vehicles using Volvo part number 6794968 radiator cap. (63 x 3mm Thread).



T-1223
Volvo VN Series
Fits vehicles using Volvo part number 1674922.



T-1233
Freightliner Columbia/Cascadia
2008 & newer
Vehicles using cap # N9685001 or BHTN968500 or BHTW3678001*



T-1229
Kenworth Vehicles using cap # N5349001.



T-1230
Volvo VN Series
2006 and newer
Fits vehicles using Volvo part number 20519046.



T-3064
Freightliner Columbia
Fits vehicles using Freightliner part number 05-20763-000 radiator cap.



T-3000
Navistar (1996 & Newer)
Fits vehicles using Navistar part number 2039390C1 radiator cap.

Rubber Expansion Plugs—Used to temporarily plug coolant lines during component replacement

A-440—3/8"	A-444—5/8"	A-448—7/8"	A-449 Kit (1) ea 3/8" to 7/8"
A-441—7/16"	A-445—11/16"	A-451—1"	
A-442—1/2"	A-446—3/4"	A-452—1-1/8"	A-467—Case
A-443—9/16"	A-447—13/16"	A-453—1-1/4"	

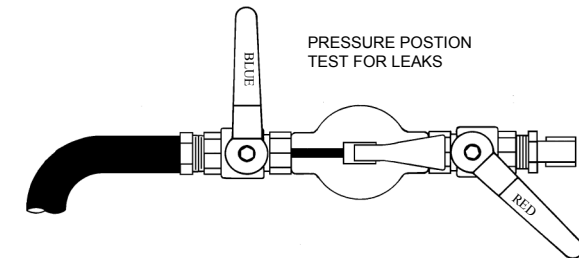
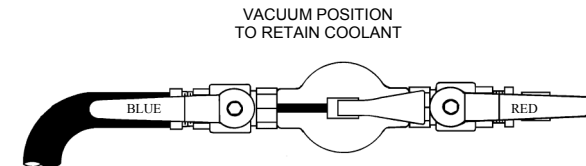
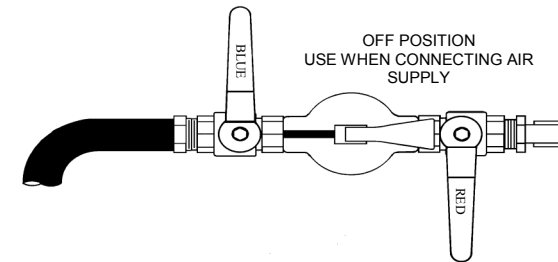
* Call for additional information regarding cap #BHTW3678801.

Note: Custom-made adapters for special Applications quoted upon request.



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CONDENSED OPERATIONAL DIAGRAMS



REPLACEMENT PARTS FOR ADAPTERS

A-480—FEMALE COUPLER	A-481—FEMALE NIPPLE	A-489—TRUCK RUBBER BUSHING
A-482—MALE COUPLER	A-512—MALE NIPPLE	A-498—CAR RUBBER BUSHING