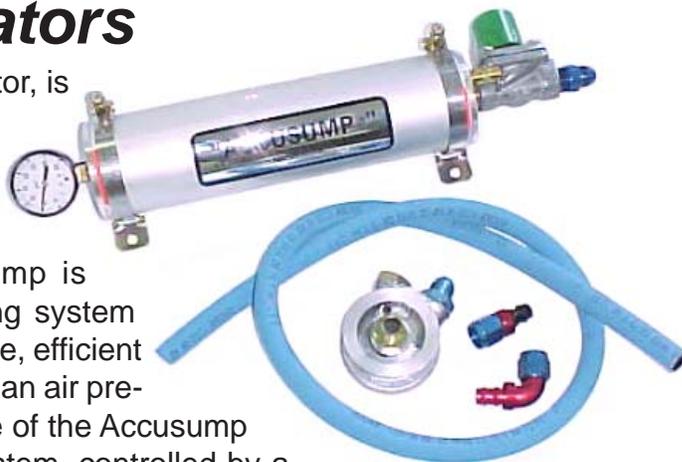


# Accusump Oil Accumulators

The Accusump, the original automotive oil accumulator, is designed to provide the engine with oil pressure before the starter is even engaged. An Accusump is a cylinder shaped aluminum storage container that acts as a reservoir of pressurized oil, to be released when there is a drop in the oil pressure. The Accusump is connected to the pressure side of an engine's oiling system and is charged by the engine's own oil pump. Its simple, efficient design revolves around a hydraulic piston separating an air pre-charge side and the oil reservoir side. On the oil side of the Accusump it has an outlet that goes into the engine's oiling system, controlled by a valve. On the air side it's equipped with a pressure gauge and a Schrader air pre-load valve.



## Function

On initial start-up when the valve on the oil side is opened the pressurized oil is released into the engine and therefore pre-lubricating the engine prior to start-up. The Accusump holds whatever oil pressure the engine has at the time that it is shut off. After the engine is started and the oil pump has taken over, oil is pumped back into the Accusump. This moves the piston back and pressurizes the Accusump until it equalizes with engine's oil pressure. While driving, if the engine's oil pressure is interrupted for any reason, the Accusump releases its oil reserve again, keeping the engine lubricated until the engine's oil pressure comes back to normal. This release of oil could last from 15 to 60 seconds, depending on the size and speed of the engine. In racing or hard driving conditions, the Accusump will automatically fill and discharge when needed as you corner, accelerate and brake.

## Surge Protection

The Accusump provides that extra margin of protection that you need against engine damage caused by loss of oil pressure. Racing and high performance street engines by nature are put under a lot of stress by the high G-load situations they are commonly placed in. As oil in your pan sloshes about, your oil pump pickup can become uncovered, which causes a loss of oil pressure and sets the stage for severe engine damage. The Accusump provides oil during these times reducing the potential for damage.

## Pre-oiling

Studies have indicated that up to 50% of wear on engine components occurs during the engine start-up, before oil pressure can be established by the oil pump. The Accusump can eliminate this "cold start scuffing" by delivering oil under pressure before the engine is started.

## Precision Built

The Accusump is built from a heavy wall, roller burnished aluminum tubing which is Teflon coated inside. Features include a double o-ring piston, screw in billet aluminum end caps, safety end clamps to prevent distortion, air pressure gauge, air pre-charge valve and a safety blow-off valve. Do not confuse Accusump brand accumulators with lesser mass market speed shop types using an older (less robust) design with stripped down features. Only Accusump accumulators incorporate the latest patented technology.

## ***Manual or Electric Valve Operation***

A valve controls the flow of oil between the engine the Accusump. In hard core racing applications a manual valve is used for simplicity. This valve can be mounted either on the Accusump directly or plumbed anywhere convenient along the feed line. With this valve, the operator has to manually open the valve before starting the engine and close the valve before shutting the engine off. For road car applications an electric valve can simplify accusump use and are ideal in applications where it is difficult to access a manual valve. An electric valve can be opened and closed from a remote dash-mounted switch or it can be wired directly into the ignition so it will open and close automatically when the ignition is in the 'on' or the 'off' position.



We assemble custom hoses.  
Call for quote.



## ***Accusump Installation***

### ***Plumbing to a Spin-on Oil Filter***

It is possible to retain the stock oil filter in its original location using a sandwich plate adaptor. This type of adaptor mounts between your existing OEM spin-on type oil filter and your engine block and connects to the Accusump by a hose. The sandwich adaptor has a single threaded 1/2" port that provides a passage directly to your engines oiling system and receives oil from the Accusump through a hose and appropriate fittings.

### ***Plumbing With External Oil Lines***

If your engine is already using an external oiling system such as a remote oil cooler or a remote oil filter, the Accusump can be plumbed into the existing lines using a T-fitting and check valve (see check valve installation on page 4). Some remote spin-on type oil filter mounts additional ports that can also be used to plumb into. We offer a full line of plumbing products for this task.

### ***Plumbing Into Engines Oil Galleys***

Some engine incorporate a predrilled inlet hole that will lead directly into an oil passage. This can provide an effective way to plumb an Accusump directly into the block so that pressurized oil is discharged directly into the oil galleys. If you are unsure, check with your mechanic or engine builder to see if your engine has this kind of provision.

### ***Ordering Information (continued on next page)***

Select tank size (1,2,3 quart), choose either manual or electric valve and add mounting clamps. Additional plumbing components are required and are available in our "Mocal Products" section.



BAT inc. 7630 Matoaka Road. Sarasota, FL 34243 ♦ phone (941) 355-0005 ♦ fax (941) 355-4683

### Accusump Tank Assembly

	part #	price \$
1 Quart (3.25" x 12")	A24-046	\$203.50
2 Quart (4.25" x 12")	A24-026	\$220.00
3 Quart (4.25" x 16")	A24-006	\$236.50



### Accusump Valve Assembly

	part #	price \$
Manual	A24-260	\$14.30
Electric	A24-270	\$173.50



manual



electric

### Accusump Mounting Clamps

	part #	price \$
1 Quart	A24-240	\$19.25
2-3 Quart	A24-200	\$18.75



### Sandwich Plate Accusump Adaptors

Thread	part #	price \$
3/4"-16	SP1+A	\$65.00
13/16"	SP1C+A	\$65.00
18mm	SP1D+A	\$65.00
20mm	SP1F+A	\$65.00
22mm	SP1G+A	\$65.00



Modified sandwich plate for use with accusump. One 1/2" input and plug for unused port.

### Remote Filter Accusump Adaptors

Filter	part #	price \$
3/4"-16	RFH4	\$35.50

Handy four 1/2" NPT port filter stand for 3/4"-16 filters. Includes one plug for unused port.



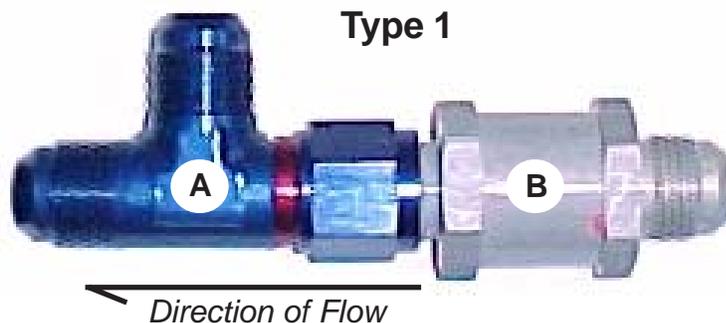
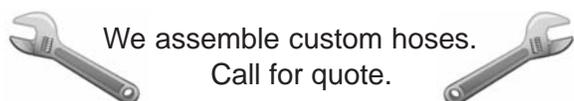
## Check Valve Installation

When plumbing an Accusump into existing oil lines it is best to install a tee fitting and check valve on the return hose as close to the engine as possible. This keeps the discharge delay to a minimum - ensuring the Accusump's maximum efficiency and performance. We have detailed two tee fitting/check valve installation options and list the components required to do the task "cleanly" with as few connections as possible.

**Type 1** uses a TEE (with female on "run") and a "mill-spec." check valve. This arrangement measures approximately 5 1/2" overall. Components are available in -8AN (1/2" hose), -10AN (5/8" hose), and -12AN (3/4" hose) sizes. Check the type of hose, and size, in your current plumbing and order accordingly. Additional hose ends are required to connect the tee and check valve to existing hose, and to connect the Accusump valve output to the tee "branch" input.

**Type 2** uses a TEE (with male NPT on "run"), a standard NPT female industrial type check valve (similar to one supplied by Canton Racing/Accusump) and a -AN male x NPT male union. This arrangement measures approximately 6" overall. Components are available in -10AN (5/8" hose) only. Check the type of hose, and size, in your current plumbing and order accordingly. Additional hose ends are required to connect the tee and check valve to existing hose, and to connect the Accusump valve output to the tee "branch" input.

Additional information on -AN hose ends for socketless or braided hose is elsewhere on our website

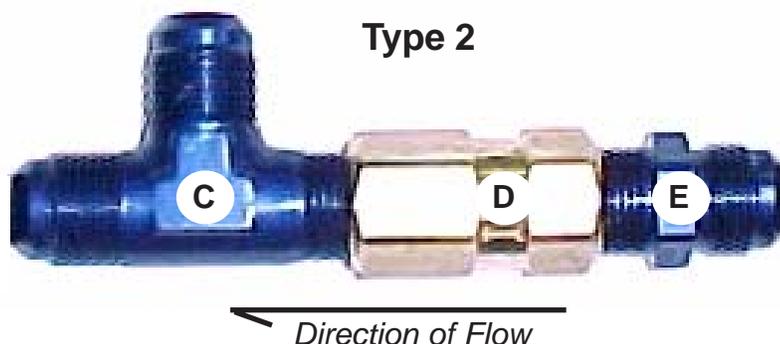


### TEE w/ Female on RUN (A)

	part #	price \$
-8AN	900308	\$24.35
-10AN	900310	\$29.50
-12AN	900312	\$30.80

### Check Valve -AN Male (B)

	part #	price \$
-8AN	CV-8	\$74.25
-10AN	CV-10	\$74.25
-12AN	CV-12	\$89.00



### TEE w/ 1/2" NPT Male on RUN (C)

	part #	price \$
-10AN	826-10	\$15.20

### Check Valve 1/2" NPT Female (D)

	part #	price \$
1/2" NPTF	CV-NPT	\$28.50

### Union -AN male x NPT male (E)

	part #	price \$
-10 x 1/2"	816-10	\$4.90