

DROP YOUR PAN - OR LOSE YOUR ENGINE

by David R. Askey

For all Airflowers that may be as fortunate as I was in obtaining a very low mileage Airflow car, I am offering the following experience. My 1935 Chrysler C-1 was purchased late in 1977 and earnest restoration began early in 1978. The car had only 26,000 honest original miles on the engine. Checking back to the family of the original owner, it proved that the had only one valve job sometime during the 1940's. Shortly thereafter the car was retired because of the original owner's death.

The engine "came to life" with almost no effort. A carburetor and fuel pump "rebuild" along with a battery spark plugs, ignition wires and fresh oil was all it took. Some "sludge and slime" came from the first several oil changes and then stopped. The engine seemed as clean as could be considering the low mileage and its strong running nature. Since owning the car I've pushed the mileage just beyond 30,000. A quality 10-40W detergent motor oil has always been used with a frequency of 500 miles for changes. The oil always drained freely with no unusual sludge or crud suggesting any internal problems. The idle pressure has always been around 15-20 lbs. and cruising at highway speeds has always produced about 40 lbs. pressure. No knocking or unusual noises have ever come from this strong running engine. The original oil filter was discarded at the outset and replaced with a larger FRAM C-4 type cannister filter. The filter has also been changed at each oil change with little evidence of dirt or sludge.

Recently I decided to take down the oil pan just to take a look at the interior of the lower part of the engine. I found very little sludge in the lowest part of the pan, so little in fact that I wiped it out with a rag. BUT NOW COMES THE FRIGHTENING PART OF THE TALE... The oversized oil screen at the bottom of the sump had only two free flowing areas about the size of quarters at the bottom. The balance of the screen was "plated" with a hard carbonized crust that allowed nothing to penetrate! Don't talk to me about non-detergent oils of the past!

It is my belief that the high deter-

gent oils I've used in my Airflow kept those small areas of the screen open. No, please don't give me the line that the detergent oils loosened up a lot of corruption that clogged the screen. The interior of the engine was not sludged up, as I said earlier it never released any evidence of extra glop when I drained the pan. The impacted material on the screen came from years of soaking in non-detergent oil.

It is my belief that after a thorough cleaning or rebuild anyone using "old" formula oils is doing a grave disservice to any internal combustion engine. I have talked to mechanics (old and young), several oil company chemists, as well as my father who marketed Standard Oil products for nearly 40 years, and no one supports the use of non-detergent oil in a cleaned up or rebuilt engine.

I was very foolish not to "drop my pan" earlier. But I believe I did the right thing all along by using modern oil with frequent changes and eventually cleaning the lower end of my engine. Incidentally, I am now using Pennzoil 10-40 SE/SF and my idle pressure stands at 35 lbs. and cruising pressure is just over 55 lbs.!

I was lucky, very lucky. For those of you who have low mileage cars that have never been opened - you need to clean the oil screen NOW! Obviously the high mileage Airflows need cleaning too.

I would gladly entertain any "evidence" against modern oils in older engines that have been cleaned properly or rebuilt, but, for now I'm convinced the life of any engine, old or new, is dependent on the latest formulations available from the collective efforts of the Petroleum Industry.

MORAL - Your Airflow will flow a lot better if your oil flows freely. (Sorry about that!) Seriously though, clean your engine.

David R. Askey

Quick Note: The Los Angeles Museum of Contemporary Art at 1st and Central in downtown L.A. has a very special exhibit of automobiles and art including members Bill Burchett's 34 Chrysler CU sedan, Bob Mcrae's 63 split window Corvette. The exhibit also includes two of Oldenburg's Airflow art pieces. The exhibit will be there until January 6. Ed.

TECHNICAL TIP - OIL FILTERS

David Askey informs us that if you the the original style bolted to the block and you know the FRAM number, your local NAPA store can probably order a modern filter for you.

For the cars converted to the old FRAM bolt on accessory cannister type filter using FRAM C-4 or C-4-P the modern NAPA number is 1006. Many other sizes are also available.

Bill Callahan found a slightly different answer at his NAPA store. He found that the apparent same cannister filter for his DeSotos is NAPA number 1035 or Wix number 51035. Either of these seem to be identical to the cannisters shown on the engine in the shop manual.

These cannisters can also still be found occasionally at swap meets. Your editor got two at his favorite parts source, Lester Harris in Upland, CA, about a year ago.

**Glad
you
asked that**

A LIST OF PART NUMBERS THAT MAY BE HELPFUL IN REPAIRING AND MAINTAINING OUR AIRFLOW CARS. It should be noted that I have a C-10 and therefore, in most cases the numbers are peculiar to Chryslers and in some cases do not apply to Chrysler Airflows of other models.
-- Harry Thomas

Clutch Plate - Borg & Beck	CD 575
Clutch Press Assem - Borg & Beck Model 871	Type 11A6
Universal Joint - Borg Warner '36 & '37	-- 114-352
Brake hoses - Bendix (front)	8282
(rear)	8290
Wagner (front)	4497
(rear)	4000
Master Cylinder - Wagner	F 544
Master Cylinder Kit - Wagner	F 3613
Wheel Cylinder - Wagner (left front)	F 3747
(right front)	F 3748
Tie Rod Ends - Thompson or Moog	ES 49
Fuel Pump - AC	489
Roller bearing on rocker idler arm '36 & '37	-
Torrington	BH-1624
Water Pump Kit - Toledo	W-8038
Delco Shocks (right front)	1735CX
(left front)	1735DX
(right rear)	1733CX
(left rear)	1733DX
Fanbelt - Goodyear or Kelley	#50
Raybestos	563
Miller	V-14
Oil Filter - AC	P.21S
Overdrive Seal - National	6404

MOTOR PARTS

Timing Chain - Borg Warner	TC-405
Timing Chain Sprocket (for crankshaft)	Cloyes S-198
Valve Springs - Sealed Power	VS-305
Camschaft Bearings - Sealed Power (set)	1079-M
Rear Main Bearing - Federal Mogul	9973-SB
Front Main Bearing - Federal Mogul	9331-SB
Center Main Bearing - Federal Mogul	9332-SB
No. 2 & No. 4 Main Bearings - Federal Mogul	9333-SB
Rod Bearings - Federal Mogul	8645-SB
Valves, intake - Thompson	V-836
Toledo	V-945
Chrysler	623652
Valves, exhaust - Thompson	S-835
Toledo	S-944
APC -Nu Krome	839
Chrysler	670507
Exhaust Valve Seat Insert (same O.D. as Dodge)	-
Thompson	IS-207
Oil Pan Gasket - Victor	30405
Head Gasket - Victor	848
McCord	6212
Felpro	7282
Pistons - interchange with Dodge flat-head top ring groove is different from the original Airflow piston.	

The Club thanks Harry for the above contribution of numbers useful in searching for New Old-Stock parts. Harry says this listing of NOS parts is not intended to be all inclusive to include all other brands etc. But it can be useful to your local parts supplier as well as to you when you hit the flea market.

They make 70 wt. oil for turbo-charged engines now, cost \$1.80 a quart. I had to buy the case as there isn't that much call for it. Order part #527-7137 as Dave Askey suggested.

OIL FILTERS - Wix WF $\frac{1}{2}$ is a replacement for Fram PB $\frac{1}{2}$ and Purolator PER $\frac{1}{2}$ which fit our cars. Wix STILL MAKES their filter! Call (704) 864-6711 and ask who your local distributor is. Order # 51035, should cost \$13.84 each.

ROOF MATERIALS - The fine short grain pattern that runs the length of the car is available from LeBaron Bonney at \$12.95 the yard. Write them at 6 Chestnut St., Amesbury, MA or call (617) 388-3811.

AUTOMATIC CHOKES had an asbestos and wire gasket under them, if you can find one to put there.

SPOT LIGHTS are an appropriate dealer installed tiem.

FUEL PUMPS - Several people who drive their cars long distances have a backup electric fuel pump (AC makes a 6 volt pump). It also helps fight vapor lock that these cars are prone to. The preferred location for the pump is on the crossmember near the gas tank. You can get percolation without a pressure regulator (something else these cars are already prone to) but some run them without it.

IMPROVED CARBERATOR: A Stromberg 1938 AAV2 will solve the percolation problems and give you better carberation in general. You will need to make a leveling plate.

UNIVERSAL JOINTS - are available from NAPA and have a grease fitting. Order Precision #344 or a u-joint that fits a Truimph TR3, 1953-58.

MASTER BRAKE CYLINDERS for a 1936 Chrysler are the same as NAPA #544 for a 1952 Dodge truck.

INSTRUMENT GAGES on the Chrysler C1 are the same as the C6 or CZ (C Zed if you are Canadian!).

AIRFLOW TOYS AVAILABLE; Bricklin toy of a 1934 Airflow Chrysler from Model Expo of Fairfield, N J (800) 526-2598 at \$49.95 + \$5.00 shipping.

Except for the Wix filter I cannot take credit for this information. The rest was collected in conversations with the following people. Any mistakes are probably mine. Thank you Bob Milbrand, Ed Patterson, Ellis Claar, Jack Bryant, Joe Ferrell, Jack Hall, Duke Casaleiz and others.