

TYPE 1 CYLINDER HEAD BUYER'S GUIDE PART ONE

We take a close look at 18 cylinder heads for the VW Type 1 engine

BY DEAN KIRSTEN

There was a time not too long ago when, if you needed a replacement cylinder head, you went to VW. But those days are now long gone. Today, the vast majority of new cylinder heads offered for the Type 1 VW engine come from aftermarket sources through a number of foundries located in Brazil, Mexico, Japan, China, and yes, even the good old USA!

Thanks to major investments by aftermarket companies, we now have an excellent assortment of everything from stock replacements to mild performance heads, to full-bore billet race models capable of handling over 1,000HP. But for the most part, the vast majority of us need a basic head that is both strong enough to withstand today's low octane fuel, and able to provide enough cooling to maintain acceptable running temperatures both on the freeway, and flat out at the local drag strip. The aftermarket has both ends of the market covered, as you will soon see.

Our search for "current" Type 1 heads took us across the country, and even to Europe, looking for what is now available. As you probably guessed, most of the VW cylinder heads come from Brazil these days, and for the longest time, they used tooling that was owned by Volkswagen. But those days could be numbered, as with the lack of complete Beetle assemblyline demand, VW is no longer in need of high production numbers of these heads (and other mechanical components). Remember, it has been since 1986 since VW produced the Beetle in Brazil, and 2002 for Mexican production. Volkswagen appears to be moving on, but at the same time, the VW aftermarket is eager to jump in and provide the necessary parts for you and I.

So in an attempt to provide our readers with a comprehensive list of what cylinder heads are now available, what they look like, what features each has and who makes them, we start with this month's selections — 18 to be exact — which is only a part of what you will see in the next two months. In this issue, we have started the ball rolling with what we call stock stud pattern heads — those heads that feature a stock 1500/1600 cylinder head, intake and exhaust stud patterns. Next month, we will display those heads that go well beyond those limits with larger intake and exhaust ports and stud locations, and bores greater than 94mm.

Probably the most common style of cylinder head we see carries the VW logo, and is made either in

Mexico or Brazil, using the 040 or 043 casting numbers. Now, these particular heads are the ones that could be on their way out of production soon, so beware. What appears to be happening behind the scenes in South America is that these molds — or similar ones — are used by the aftermarket to make their heads, in variety of spark plug configurations, valve seat sizes, combustion chamber shapes, and on and on. So while you may see a common number like 043, that only relates to the base tooling, and does not define the actual head details. Basically, not all 040 (or 042) heads are created the same. In this world of original VW-style heads, there are dozens of importers who are having heads made outside the U.S., to their own specifications. In our story, we have heads that came from IAP West and US Auto Barn, who are large importers and wholesalers (and do not sell to the public), but companies like Bugpack sell through a dealer network, and companies like CB Performance, Wolfsburg West, MoFoCo and AA Performance Products who do sell directly to the public.

As you begin to dive into this story, you will see that each head is shown from five different angles (intake, exhaust port, combustion chamber, valve cover area and perhaps most important, the cooling fins from underside). The main goal of this story is to provide you with a basic knowledge of what lies out there in the cylinder head world. As they say on TV, choose wisely.

AA Performance Products

(626) 333-5555

Gene Berg Enterprises

(714) 998-7500

BUGPACK

(714) 979-4990

CB Performance

(559) 733-8222

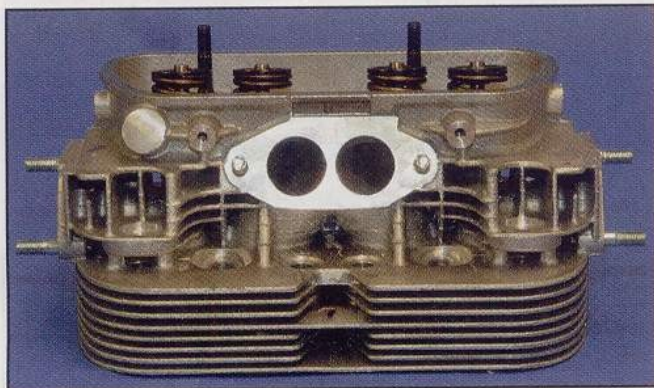
MoFoCo

(800) 558-8955

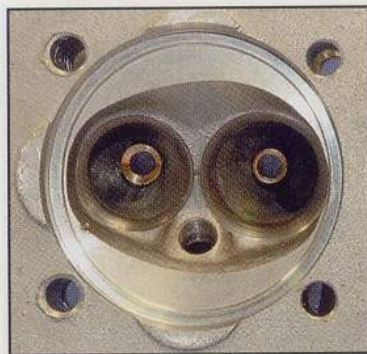
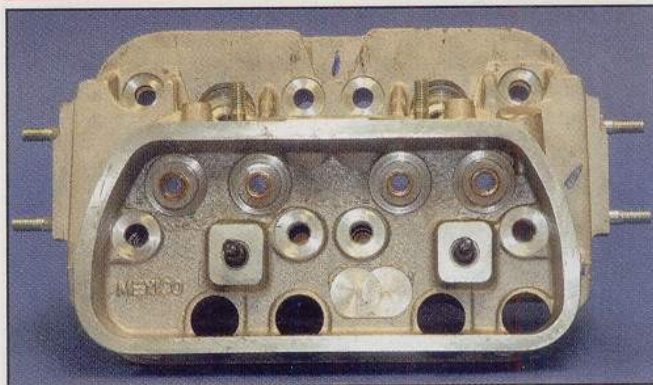
Wolfsburg West

(951) 549-0525

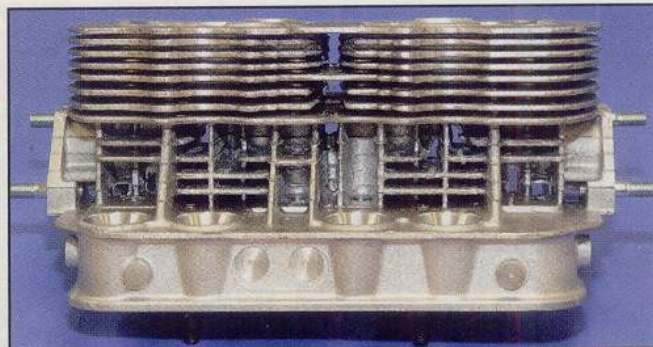
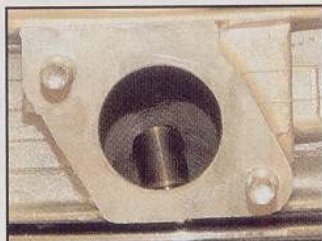
IAP WEST — AC101333
"OutLaw"



ORIGIN: Made in Mexico
CASTING MARKS: Mexico
FEATURES: 40mm x 35.5mm blended seats, sensor boss, 14mm x 3/4-inch spark plugs

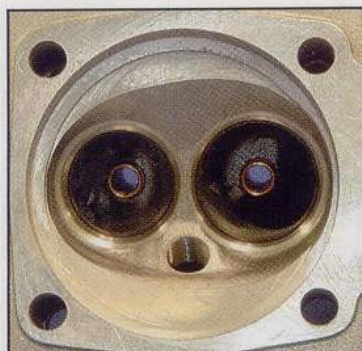
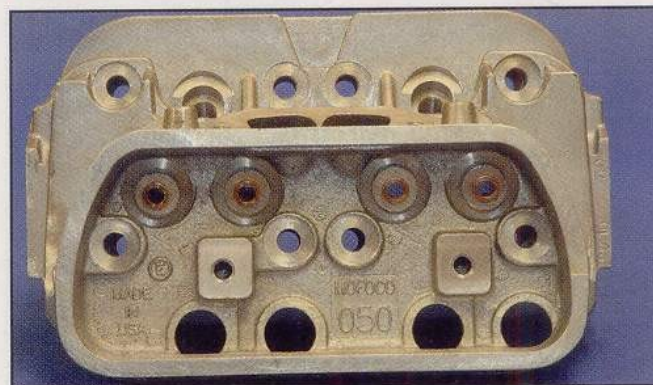
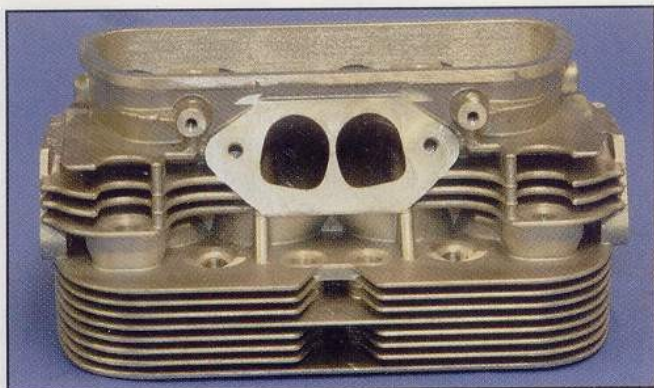


Outlaw heads come with stainless valves and chromoly retainers.



MOFOCO 050

ORIGIN: Made in USA
CASTING MARKS: MoFoCo, 050
FEATURES: 42mm x 37.5mm seats, 14mm x 3/4-inch spark plugs, 54cc chambers, D-port intakes



050 casting heads come with as-cast D-intakes and enlarged exhaust ports.

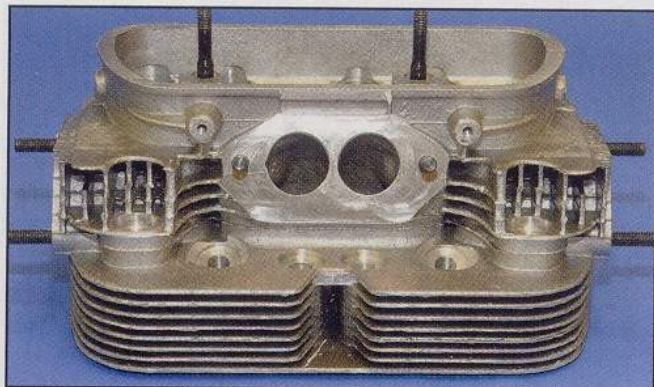


CB PERFORMANCE 044

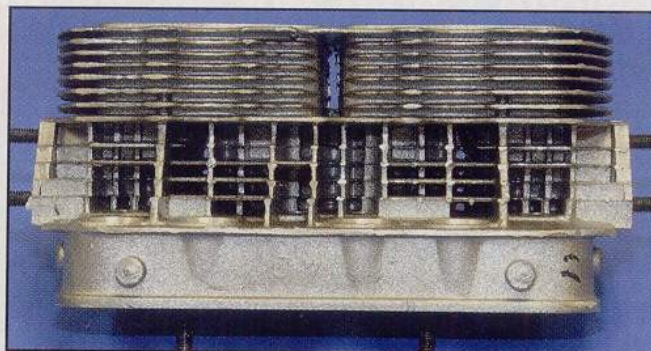
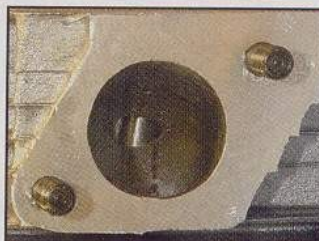
ORIGIN: Made in BRAZIL

CASTING MARKS: CB, 044, GO4

FEATURES: 40, 42, 44, 46, 48mm intakes, 32, 35, 37.5, 40mm exhaust, 12mm x 3/4-inch spark plugs, 85.5mm, 90.5/92mm, 94mm bores



A CB Performance exclusive casting. Used on numerous CNC applications.

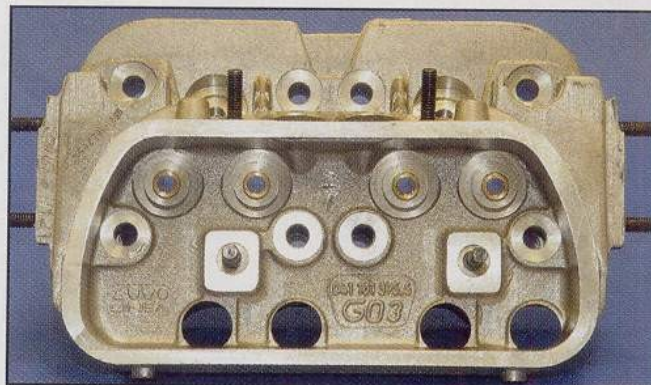
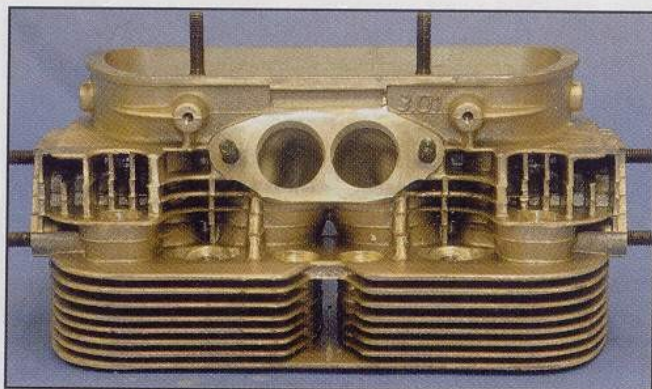


IAP WEST AC 101 333 BR

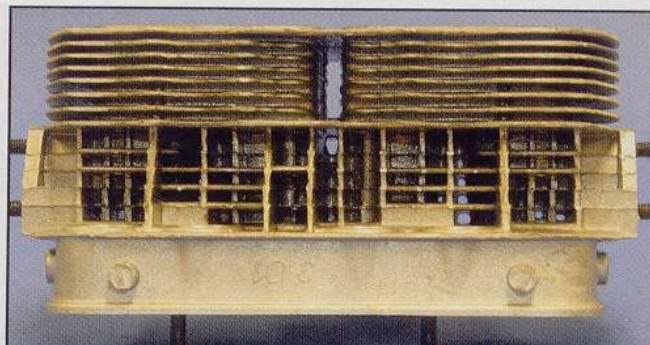
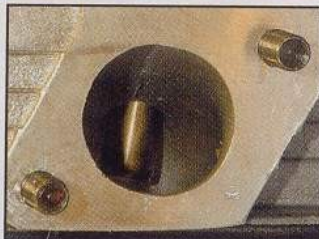
ORIGIN: Made in BRAZIL

CASTING MARKS: Auto Linea, 041 101 375.5, GO3, 3.01

FEATURES: 40mm x 35.5mm valve seats, 12mm x 3/4-inch spark plugs, studs, 8mm guides

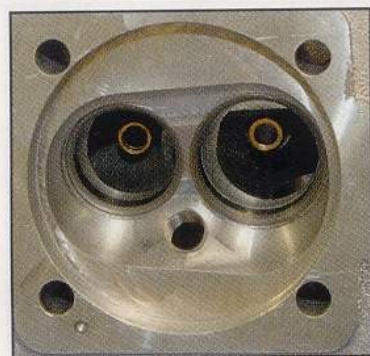
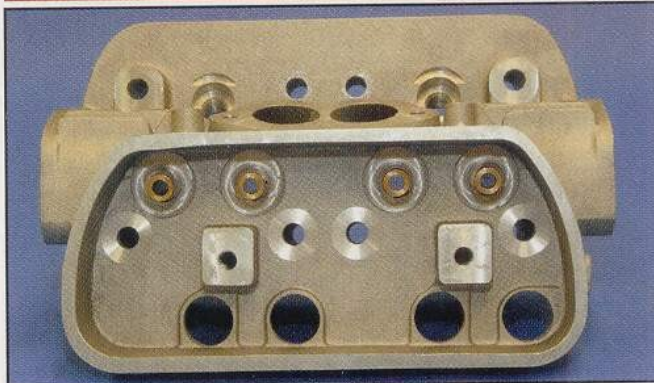
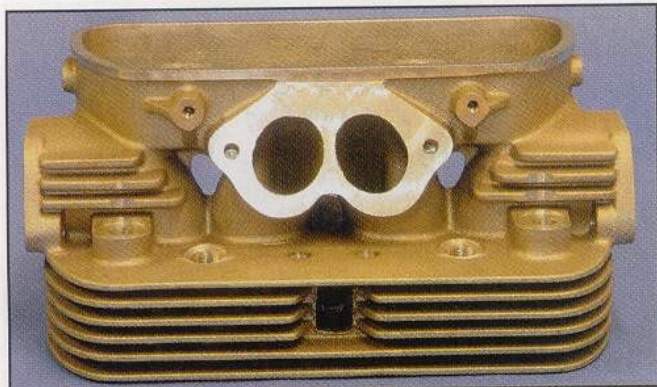


041 head made by Auto Linea in Brazil. Big seats and 12mm plugs.

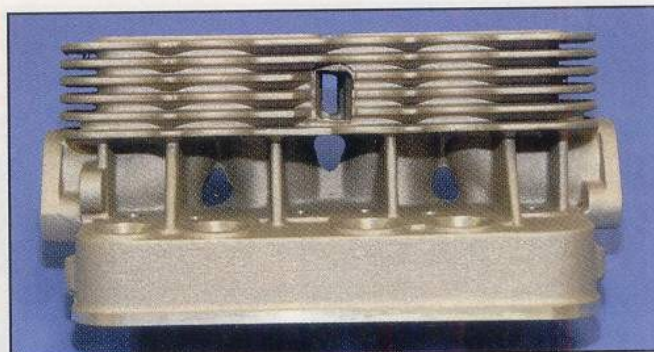


BUGPACK STREET ELIMINATOR

ORIGIN: Made in USA
CASTING MARKS: None
FEATURES: 356 T-6 aluminum, 40mm, 42mm
44mm intakes; 35.5mm, 37.5 exhausts, 12mm x
3/4-inch spark plugs, oval intakes

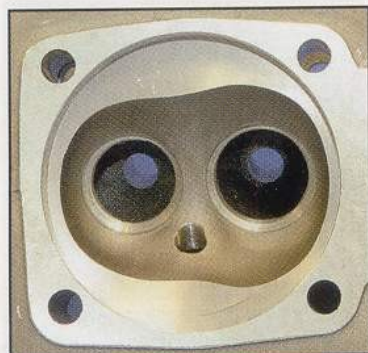
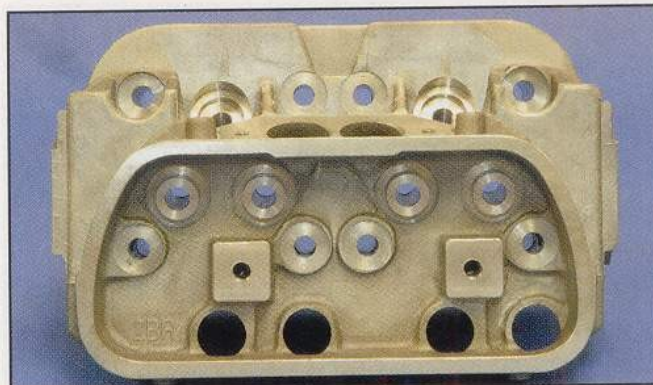
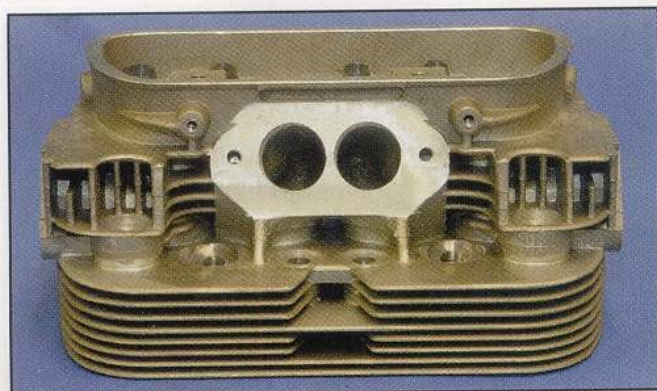


Oval intake ports, CNC
combustion chambers
and cut for dual springs.



AA PERFORMANCE PRODUCTS 5.01

ORIGIN: Made in CHINA
CASTING MARKS: 5.01, 2BR
FEATURES: Head porter special, comes without
seats, guides and studs, 12mm x 3/4-inch
spark plugs

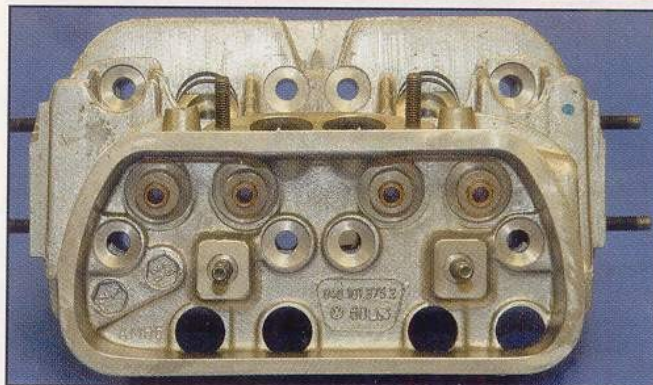
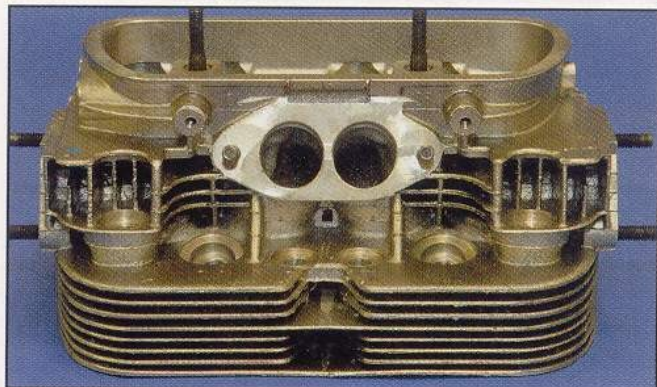


Called the "Head porter's
special", as it comes bare,
ready to modify as needed.

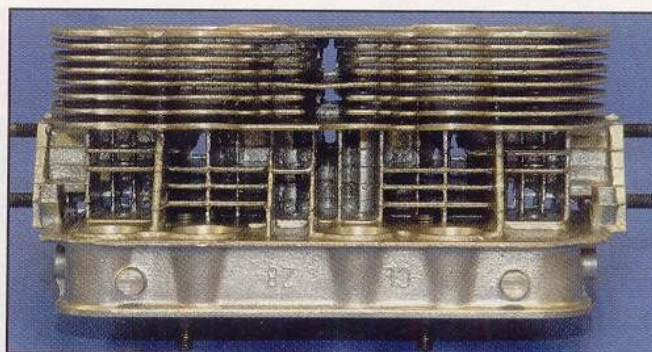


US AUTO BARN — 35519
040 101 375.2

ORIGIN: Made in BRAZIL
CASTING MARKS: VW, AMH 6, 60, CL 28
FEATURES: 8mm guides, 14mm x 1/2-inch spark plugs, 35.5mm x 32mm seats, sensor boss

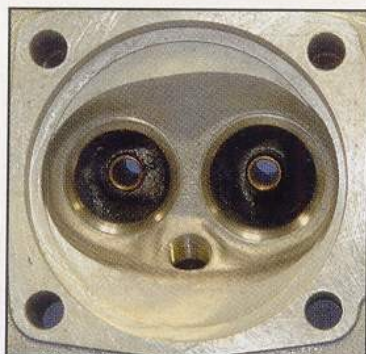
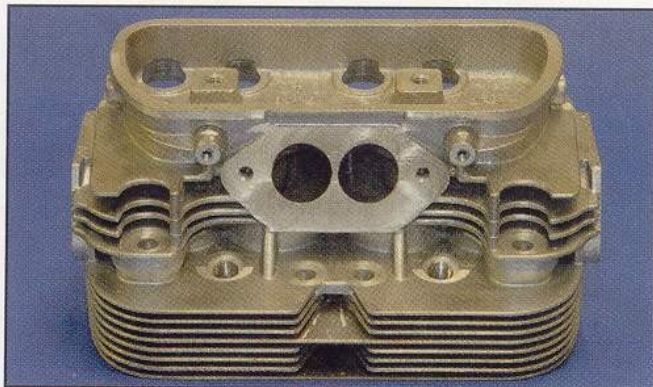


VW casting that may be hard to find soon. Stock valves and 14mm plugs.

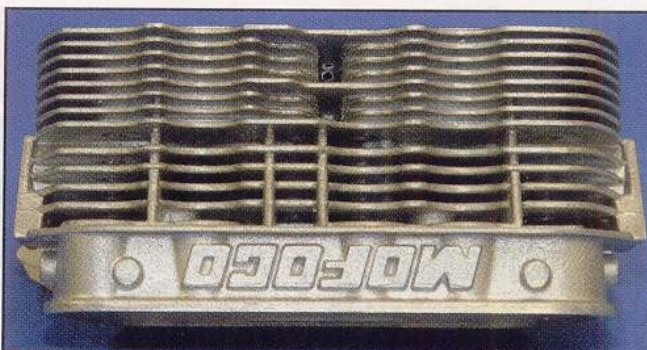


MOFOCO 040

ORIGIN: Made in USA
CASTING MARKS: MOFOCO 040
FEATURES: 35.5, 39mm, intakes, 32mm exhausts, 14mm x 3/4-inch spark plugs, 90.5/92mm, 94mm bores. 54cc chambers



MofoCo's upgraded stock replacement head made in the US.

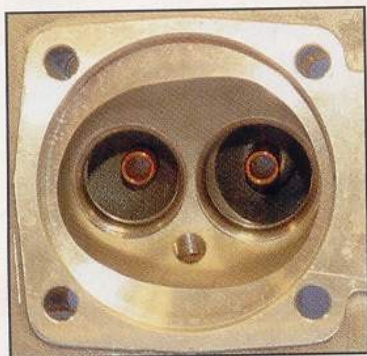
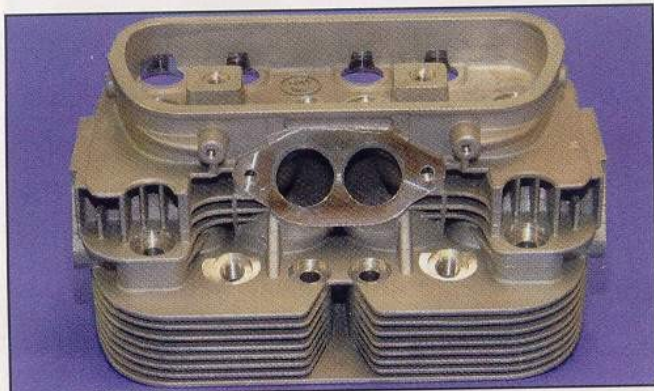


BUGPACK STREET PRO

ORIGIN: Made in JAPAN

CASTING MARKS: RM 049

FEATURES: 40mm x 35.5 exhaust, 12mm x 3/4-inch spark plugs, 90.5/92mm, 94mm bores



An all-new casting with big valve seats and cut for dual springs

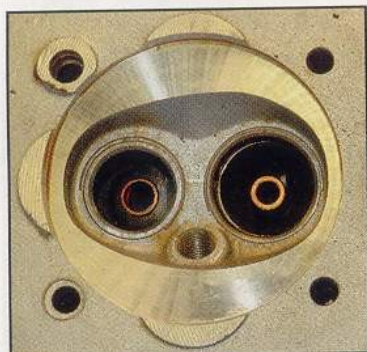
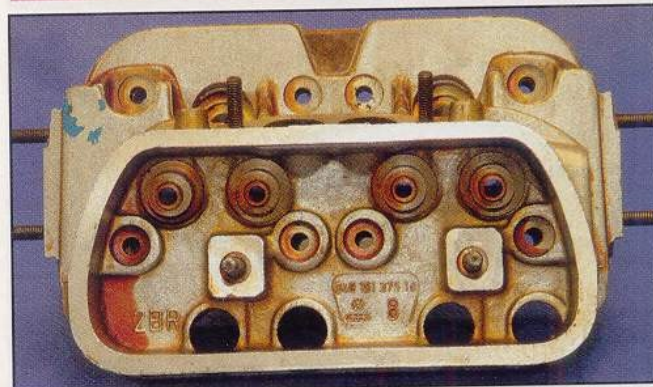
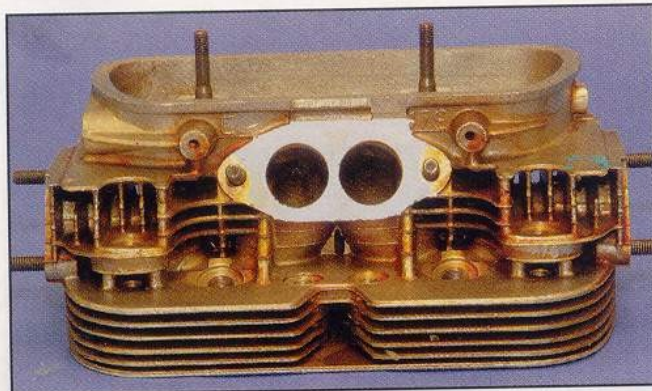


US AUTO BARN 040 101 375.16

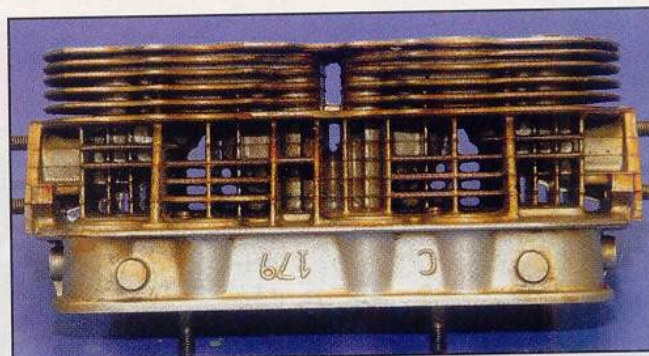
ORIGIN: Made in BRAZIL

CASTING MARKS: VW, Audi, 2BR, C, 179

FEATURES: 35mm x 32.5mm valve seats, 14mm x 3/4-inch spark plugs, hi-compression combustion chambers, six fins



A rare VW head from the past with two less fins and small chambers.

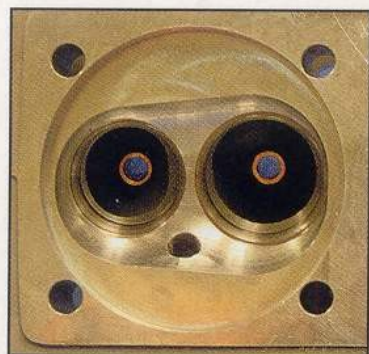
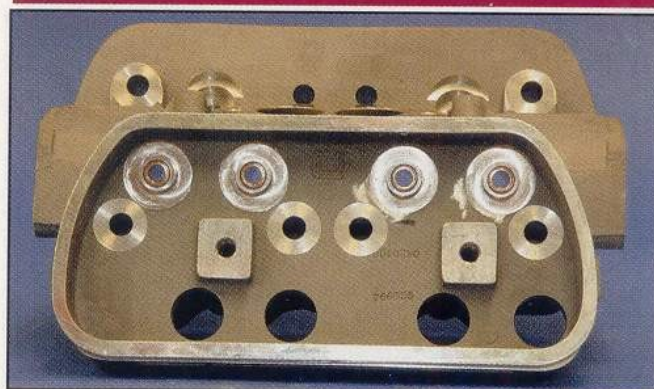
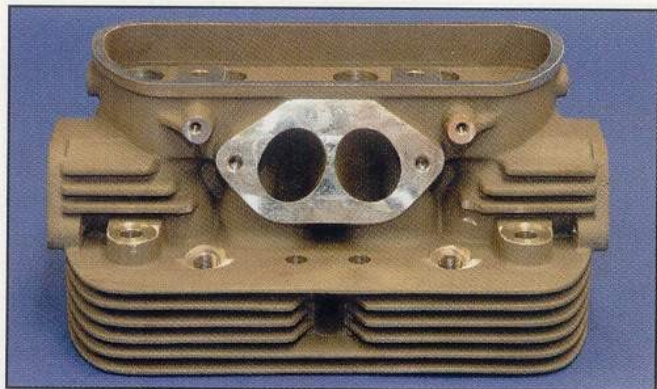


CB PERFORMANCE ELIMINATOR 2000

ORIGIN: Made in USA

CASTING MARKS: CB Performance, USA

FEATURES: Oval intake ports, 40, 42, 44, 46, 48mm intakes; 35.5, 38, 40mm exhausts, 12mm x 3/4-inch spark plugs, thicker rocker floor



An up-dated casting of proven design. Relocated pushrod tube holes.

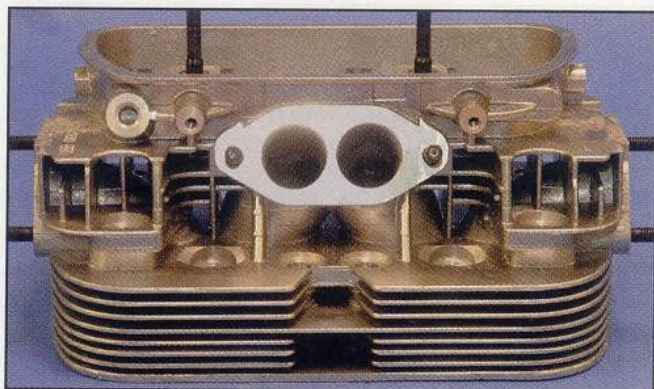


IAP WEST 043 101 355 CK

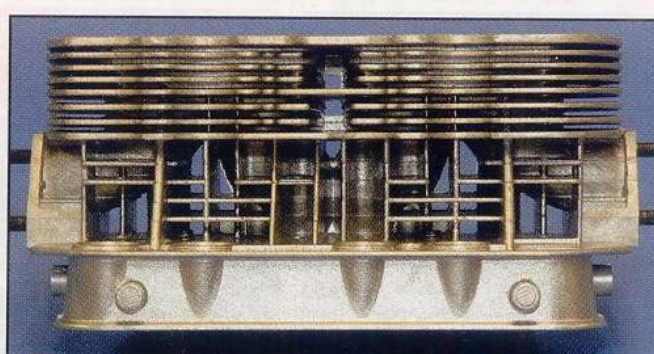
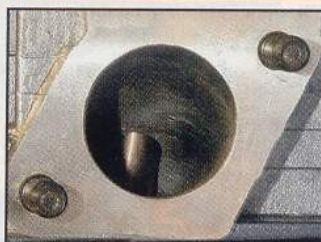
ORIGIN: Made in CHINA

CASTING MARKS: None

FEATURES: 35.5mm x 32mm seats, 14mm x 1/2-inch spark plugs, sensor boss

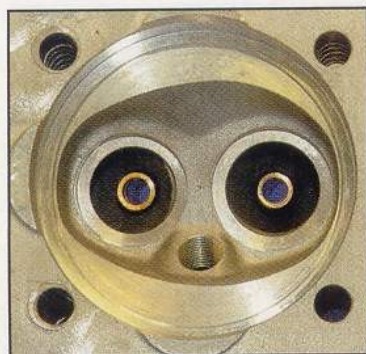
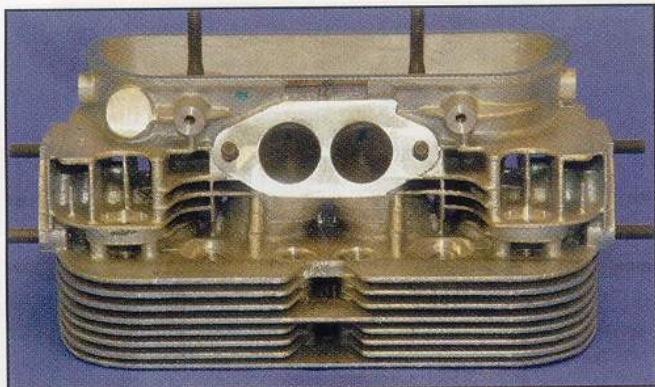


A replacement head made in China, without any ID marks.

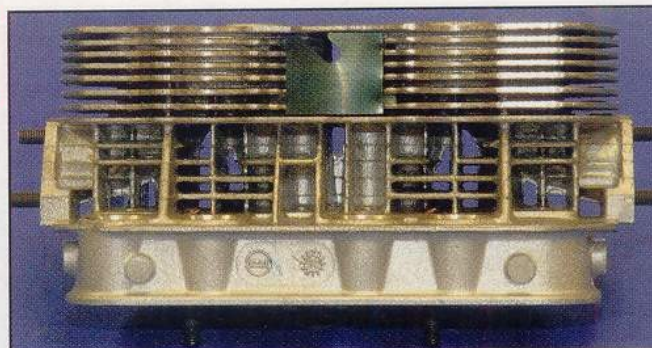


**IAP WEST
AC 101 045 B**

ORIGIN: Made in MEXICO
CASTING MARKS: VW, Mexico, 043 101 375H, 5
FEATURES: no valve seats, 14mm x 3/4-inch spark plugs, 8mm guides, studs, sensor boss

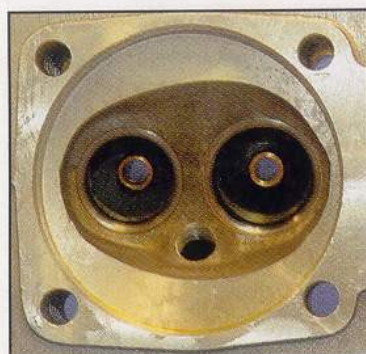
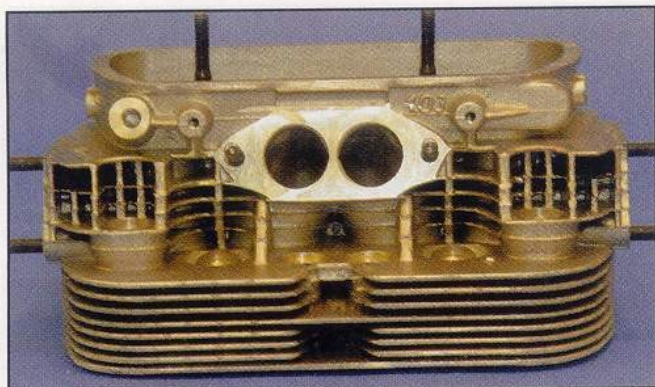


A VW of Mexico head with no seats, and large 14mm x 3/4" spark plug.



**IAP WEST
043 101 355 CKBR**

ORIGIN: Made in BRAZIL
CASTING MARKS: Auto Linea, 040, GO1, 1.03
FEATURES: 35mm x 32.5mm seats, 12mm x 3/4-inch spark plugs, 8mm guides, sensor boss

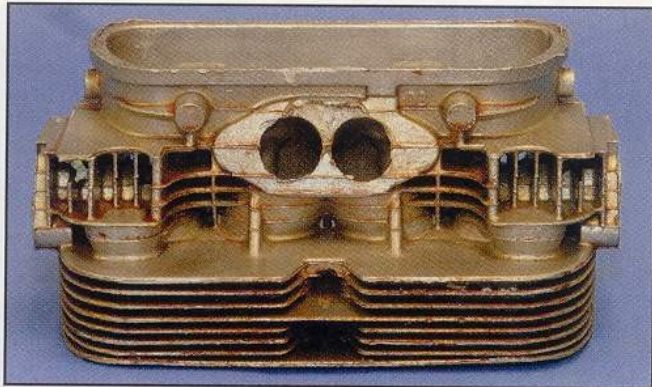


Auto Linea-made 043 head with stock valves and small 12mm plugs.

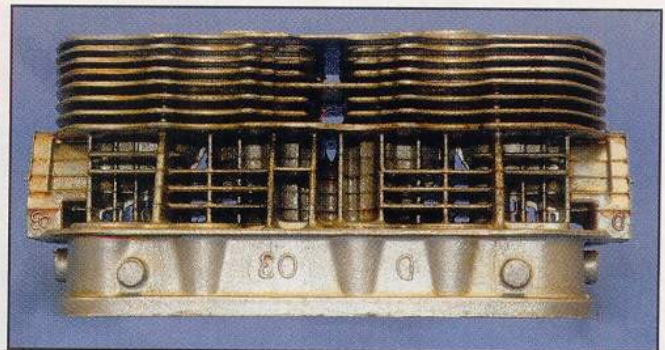


GENE BERG
041 101 375 2

ORIGIN: Made in BRAZIL
CASTING MARKS: VW, Audi, 03 D, 81
FEATURES: Raw casting, no seats, guides, studs, spark plug holes, rocker arm studs

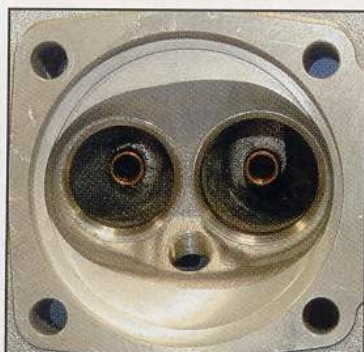
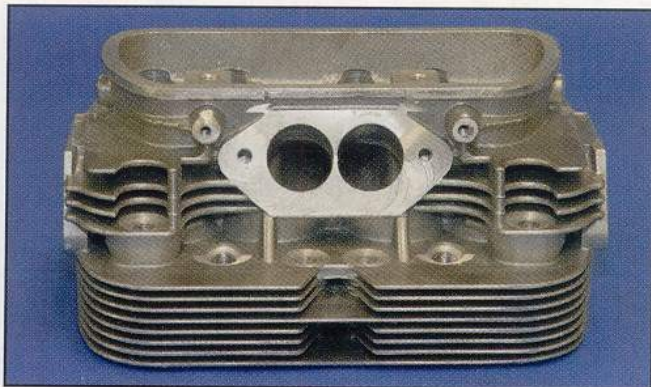


It maybe ugly, but this casting allows for any mods you may wish to do.

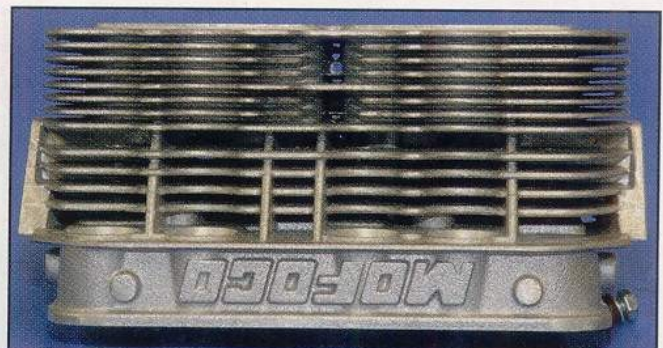
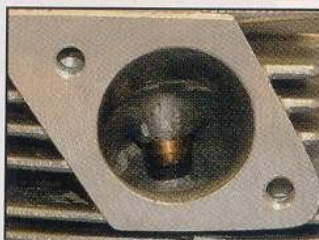


MOFOCO 042

ORIGIN: Made in USA
CASTING MARKS: MOFOCO 042
FEATURES: 12mm x 3/4-inch spark plugs, 85.5mm, 90.5/92mm, 94mm bores, 40mm x 35.5mm seats, 54cc combustion chambers

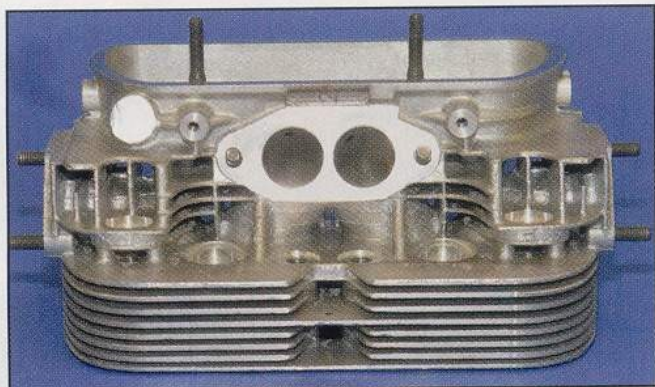


One of three performance castings made by MoFoCo in the US.

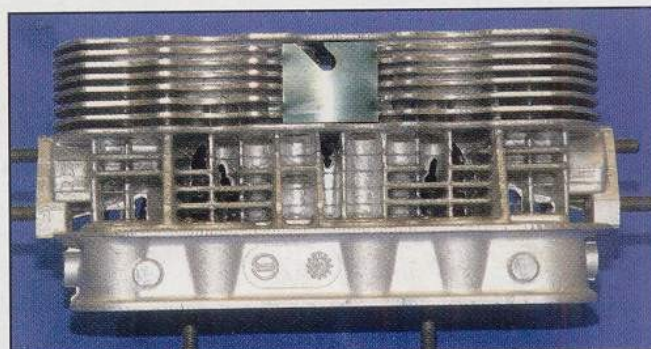


**US AUTO BARN — 356D
043 101 375H**

ORIGIN: Made in MEXICO
CASTING MARKS: VW, 043 101 375H, 5
FEATURES: 35mm x 32.5mm valve seats, 14mm x 1/2-inch spark plugs, sensor boss

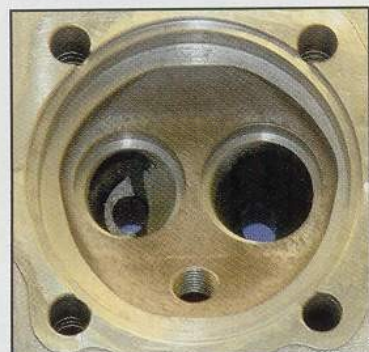
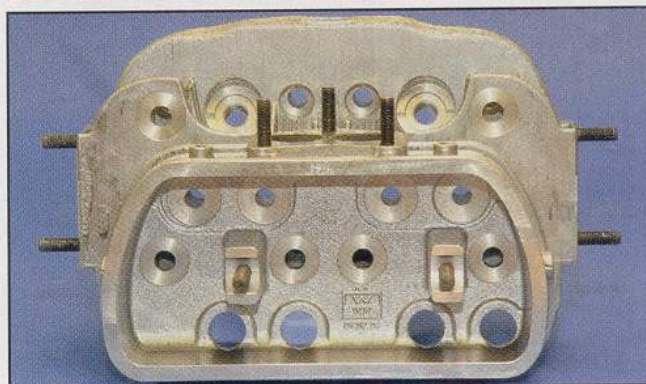
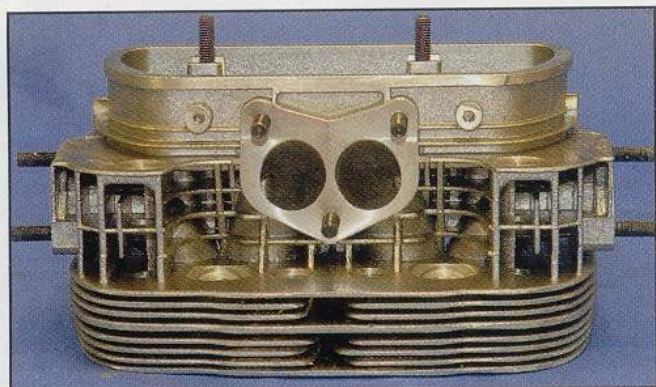


A VW head that may become extinct soon. Stock valves and 14mm plugs.



**WOLFSBURG WEST
36hp OKRASA**

ORIGIN: Made in BRAZIL
CASTING MARKS: WW, 01 07 24
FEATURES: dual-port 1200cc/36hp Okrasa design, 33mm intake and 28mm exhaust seats, 14mm x 1/2-inch spark plugs, 45cc chambers



A modern day remake of a 36hp performance head once made by Okrasa.

