Carter AFB finish (1964-1966 GTO)

Aluminum – clear natural.
Steel pieces – electroplated (see below).
Zinc alloy (pump housings, choke housings) – zinc chromate.
Tags – anodized (colored coded) aluminum

Carter Carburetor Company was located across the street from Crown Plating. As batches of steel carburetor pieces were received, they were sent across the street to Crown for plating. Carter had a minimum corrosion specification for plating. This specification could be met by zinc (both white and the yellow conversion) or cadmium (both white and the yellow conversion). Parts were plated whatever of the above four finishes that Crown was running that day.

The most common of the above finishes seems to have been white zinc; however I have new old stock carburetors which exhibit various parts with all four of the above finishes on the same carburetor. Any of the above could be used for show, and be considered correct.

Note that later production (1970's etc.) service units might have different finishes. Specifically, throttle shafts were finished in black oxide; and steel pieces were dichromate. The black oxide is a less expensive finish that does not hold up well. The dichromate finish (used by most carburetor builders today) is less expensive than the original and a better finish; however, it would be incorrect for show. The dichromate finish is characterized by a bright gold iridescent appearance.

The aluminum tags were color-coded anodized aluminum. This is also true for Rochester carburetor. The tags on the display units are the correct colors. Generally, one "bath" in carburetor cleaner was sufficient to "bleach" the color from the tags; which is why most surviving tags appears to be natural aluminum color.

Printed Resources for Carter AFB

Carter AFB Circuit manual
Carter Master Parts catalogue
Carter Competition Series catalogues (listings of performance parts/sizes)
Pontiac factory service manual
Pontiac factory Master Parts catalogue

The Carburetor Shop LLC *www.thecarburetorshop.com* *(573-392-7378 (O)*
204 East 15th Street *Eldon, Missouri 65026*

GTO Carter AFB data

Carburetor number	3647	3649	3895	3896	4030	4033	4034	4041
Year	1964	1964	1965	1965	1966	1966	1966	1966
Carburetor engineering status	S	SA	S	S	S	S	S	S
Transmission code	S	A	S	A	A	S	A	S
Application	All	All	All	All	Calif.	Fed.	Fed.	Calif.
Primary throttle bore	1 7/16	1 7/16	1 7/16	1 7/16	1 7/16	1 7/16	1 7/16	1 7/16
Secondary throttle bore	1 11/16	1 11/16	1 11/16	1 11/16	1 11/16	1 11/16	1 11/16	1 11/16
Primary venturi	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16
Secondary venturi	1 9/16	1 9/16	1 9/16	1 9/16	1 9/16	1 9/16	1 9/16	1 9/16
Vents (airhorn and body)	8	8	8	8	8	8	8	8
Low speed jet size	0.038	0.035	0.038	0.035	0.036	0.040	0.035	0.035
Idle bypass size	0.0595	0.052	0.0595	0.052	0.055	0.057	0.0595	0.0571
Idle economiser size	0.0571	0.051	0.0571	0.051	0.0465	0.0571	0.0465	0.052
Idle air bleed size	0.0571	0.059	0.052	0.059	0.055	0.052	0.052	0.055
Idle port size	.200x.030	.200x.030	.200x.030	.200x.030	.160x.030	.205x.030	.180x.030	.200x.300
Primary anti-perculation bleed size	0.028	0.028	0.028	0.028	0.031	0.028	0.031	0.031
Secondary anti-perculation bleed size	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
Secondary discharge port size	0.082	0.082	0.0635	0.0465	0.0635	0.0635	0.0635	0.0635
Secondary discharge air bleed size	0.0292	0.0292	0.0465	0.0465	0.0465	0.0465	0.0465	0.0465
Pump jet diameter	0.028	0.028	0.033	0.033	0.028	0.033	0.028	0.033
Vacuum spark port diameter		0.06			.130			.130
Carb bowl casting (0-)	1547	1450	1737	1737	1789	1820	1820	1789
Carb airhorn casting (6-)	1694	1694	1694	1694	1769	1779	1779	1769
Carb choke housing casting (170-)	563	563	738	738	738	738	738	738
Primary venturi cluster stamp number choke side	761	778	850	778	928	912	916	932
Primary venturi cluster stamp number throttle side	762	779	851	779	929	913	917	933
Secondary venturi cluster stamp number choke side	475	475	846	836	846	846	846	846
Secondary venturi cluster stamp number throttle sid	476	476	847	837	847	847	847	847
Metering rod part number (16-)	299	126	45	345	80	419	439	421
Metering rod high vacuum diameter	0.067	0.0675	0.0635	0.0655	0.067	0.068	0.067	0.066
Metering rod low vacuum diameter	0.055	0.055	0.055	0.054	0.058	0.058	0.056	0.058
Primary jet number (120-)	166	166	155	155	166	166	166	166
Primary jet diameter	0.0935	0.0935	0.091	0.091	0.0935	0.0935	0.0935	0.0935
Secondary jet number (120-)	233	165	194	194	194	194	194	194
Secondary jet diameter	0.081	0.086	0.0785	0.0785	0.0785	0.0785	0.0785	0.0785
Hot idle compensator	☐	☑	☐	☑	☑	☐	☑	☐

Rochester tripower 1964- 1966 GTO

1964

Manifold 9775088
Vacuum motor 1998857 (mounted on rear carburetor)
Vacuum control switch 7028797 (mounted on center carburetor)
Front to rear carburetor link 7015362

Front (A/T, S/T) 7024178 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)
Center (A/T) 7024173 (airhorn casting 7017917, bowl casting 7019929, throttle body casting 3530)
Center (S/T) 7024175 (airhorn casting 7017917, bowl casting 7019927, throttle body casting 3530)
Rear (A/T, S/T) 7024179 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)

Fuel lines aluminum

1965

Manifold 9778818 (this number often appears to be 9778815 due to a casting problem)
Vacuum motor 1998857 (mounted on rear carburetor)
Vacuum control switch – GTO 7029693 (mounted on center carburetor)
Front to rear carburetor link 7015362

Front (A/T) 7024178 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)
Front (S/T) 7025178 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)
Center (A/T GTO) 7024177 (airhorn casting 7017917, bowl casting 7019929, throttle body casting 3530)
Center (S/T) 7025175 (airhorn casting 7017917, bowl casting 7019927, throttle body casting 3530)
Rear (A/T) 7024179 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)
Rear (S/T) 7025179 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)

1966

Manifold 9782898 original cast iron (there is a reproduction of aluminum)
Vacuum motor (A/T) 1998857 (mounted on rear carburetor)
Vacuum control switch (A/T) – 7031598 (mounted on center carburetor)
Front to rear carburetor link 7015362

Front (A/T) 7024178 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)
Front (S/T) 7025178 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)
Center (A/T) 7026074 (airhorn casting 7031587)
Center (S/T) 7026075 (airhorn casting 7031587, bowl casting 7031575, throttle body casting 31892)
Center (S/T A.I.R.) 7036175 (airhorn casting 7031587)
Rear (A/T) 7024179 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)
Rear (S/T) 7025179 (airhorn casting 7013206, bowl casting 7029683, throttle body casting 15211)

Fuel lines – mostly aluminum; however some from the Van Nuys plant were steel

Finish

Zinc alloy parts – chromate
Steel parts mostly yellow zinc, except body screws black oxide
Cast iron (throttle body) black oxide