

MID-YEAR MASTERS

Long Island Corvette Supply leads us on a journey to identify '63-'67 master cylinders

by Tom Rounds

As Corvette enthusiasts, we continually seek to have only the very best. Among mid-year enthusiasts, the goal has always been to have the best information in order to validate and identify the components that comprise the '63 to '67 Corvettes.

We recently had the opportunity to work with Richard Cohen of Long Island Corvette Supply who "carries the most complete line of '63-'67 parts." Richard has also served as an NCRS judge. According to Richard, "two or three different master cylinders were used each year for '63 to '67 Corvettes."

Richard sent us 10 master cylinders so we could help '63-'67 owners identify the 11 master cylinders available in that era. The only master cylinder not photographed was the '64 power brake component which is identical to the '64-'65 non-power drum-brake unit except for the addition of a bleeder screw.

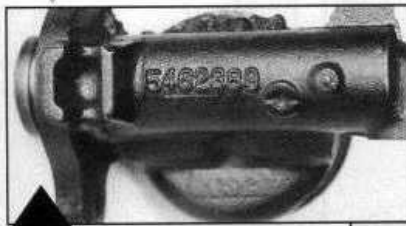
So, join us as we walk through the variety of mid-year master cylinders, with Richard Cohen leading the way.



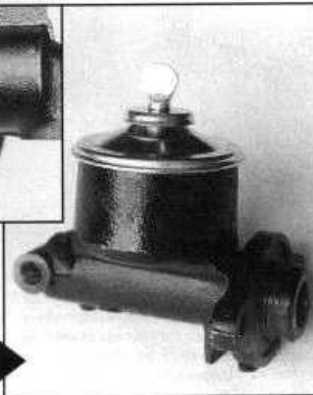
1963

For the '63 model year, three master cylinders were offered. They included casting number 5462389 for applications without power assist; 5462389 for applications with power assist; and E48327—the "Special Performance Equipment" '63 Z06 that we discuss on the next page.

The two master cylinders displayed here are Delco Moraine components, as indicated by the opposing half-circle logo displayed near the casting number.



Casting No. 5462389—Non-Power: The most obvious identifying feature on the '63 master cylinder without power is the thumbscrew holding the cover in place. The body is painted semigloss black and has a zinc-plated (silver) cover. The photo above displays the casting number of 5462389, which is located on the bottom.

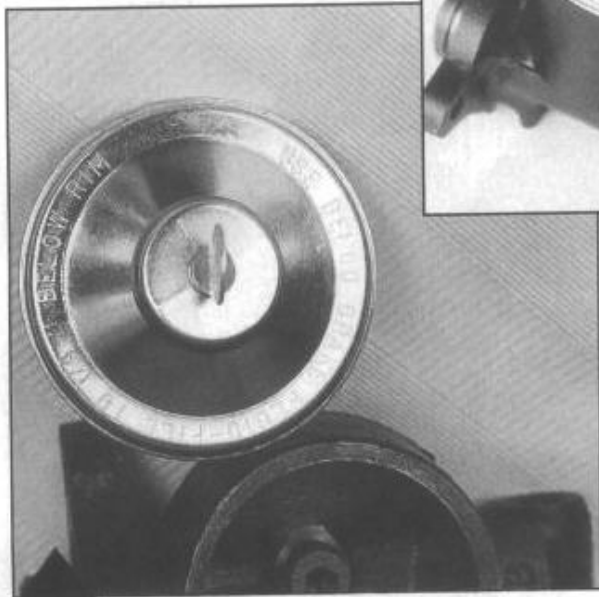


Casting No. 5462389—Non-Power: Additionally, this master cylinder has a 7/4-inch id bore and uses a single brake-line orifice. There is no bleeder screw on this master cylinder. 1963 continued...

1963

continued...

MID-YEAR MASTERS



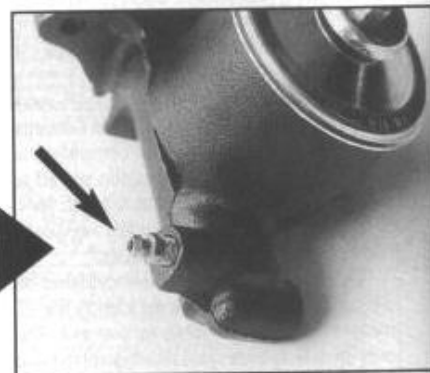
Casting No. 5462389—Non-Power: The thumbscrew cover displays the text "USE DELCO BRAKE FLUID—FILL TO 1/4" BELOW RIM."



Casting No. 5462389—Power: Identical to the '63 without power, the distinguishing factor is the hex-head screw on the top to retain the cover as opposed to the thumbscrew. The photo (above right) notes the same casting number of 5462389.



Casting No. 5462389—Power: The second identification of a power-brake master cylinder for the '63 model year is the bleeder screw (arrow).



1963 AND 1964

Z06

J56

The Z06, designed for competition, originally included a 36-gallon tank, knock-off wheels, fuel injection, four-speed transmission, and Z06 brakes. As such, GM turned to Kelsey Hayes for brake components, including the E48327 master cylinder casting.

The same master cylinder casting also appeared in '64 under Regular Production Option number J56 which designated a special sintered-metallic brake package—a rare addition that appeared only on 29 '64 Corvettes.



Casting No. E48327: The rarest in the set, the Z06 and J56 uses a special metallic brake and has a 1-inch bore with dual brake lines. The body is plated zinc dichromate, a yellow color, with a copper-plated cover. The inset photo notes the casting number E48327, which is located on the bottom with "Kelsey Hayes" prominently displayed.



Casting No. E48327: The copper-plated cover reads "USE ONLY SAE HEAVY DUTY BRAKE FLUID."

1964 TO 1965

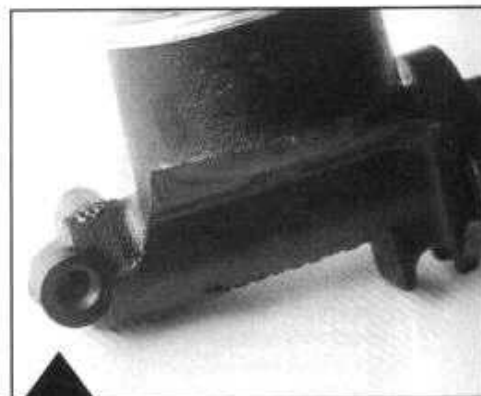
Three castings were used over these two model years which include the introduction of standard disc brakes in the '65 model year.

However, the disc brakes were a cost-delete option in '65 (RPO J61) and, according to the *Corvette Black Book*, this RPO was offered only while supplies lasted. Obviously, one of the supplies needed was the '64 non-power-assist master cylinder, casting number 5464264. Only 316 cars were trimmed down with the RPO J61 package.



Casting No. 5464264: Shown here is the master cylinder for two applications: '64 without power brakes, and '65 with drum brakes and no power assist. Neither of these applications has a bleeder screw. Not photographed is the '64 with power brakes. It is identical to this part, carries the same casting number, but differs only in that it has a bleeder screw.

This master cylinder casting has a domed zinc-dichromate-plated cover saying "USE DELCO BRAKE FLUID" and has a bail wire hold-down. The inset photo displays the casting number of 5464264, which is located on the bottom.



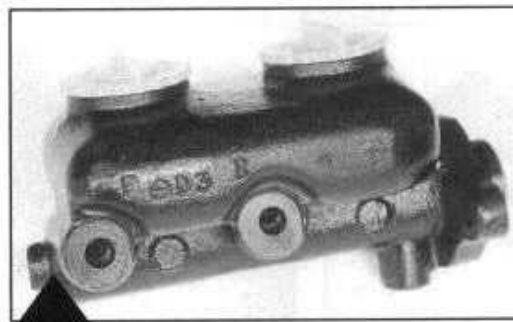
Casting No. 5464264: This master cylinder has a 7/8-inch bore with a single brake line. The body is painted semigloss black.



Casting No. 2225032: The '65 (without power disc brakes) master cylinder is painted semigloss black. It uses a single brake line with a 1-inch bore. The photo to the right displays the casting number 2225032, which is located on the bottom.



Casting No. 2225032: The cover is flat and round, and has an imprint saying, "USE ONLY SAE 70 R3 BRAKE FLUID." The cover is held in place by two straps, one on each side, and are also painted semigloss black.



Casting No. 5467084: This power disc brake master cylinder has a 1-inch bore with dual 3/16-inch brake lines (there are no adapters in the master cylinder to reduce the 1/4-inch lines to 3/16-inch), and no bleeder screws. This master cylinder is painted semigloss black. The inset photo displays the casting number 5467084, which is located on the side of the master cylinder facing the engine.



Casting No. 5467084: There are two round plastic screw caps that say "USE DELCO BRAKE FLUID." When new, these caps are white, but with age and dirt they may turn a yellowish color.

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1966

Two master cylinder castings were offered in '66, with the distinction being power and non-power assist. On the power-assist master cylinder, casting number 5467084, the main distinction was a dual-reservoir setup, as would soon be required by NHTSA regulations enacted for the '67 model year.

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Casting No. 2225032: The '66 without power master cylinder body is painted semigloss black and has two zinc-plated cover straps, one on each side. The inset photo displays the casting number 2225032, which is located on the bottom.

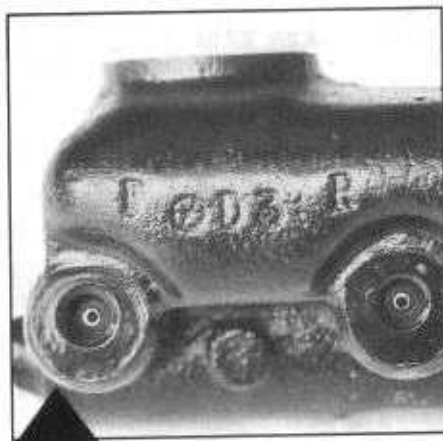
Casting No. 2225032: This master cylinder has a 1-inch bore with a single 1/4-inch brake line coming out of the end.



Casting No. 2225032: The flat, round cover reads "USE ONLY SAE 70 R3 BRAKE FLUID" and is zinc-dichromate plated. The straps are zinc-plated (silver).



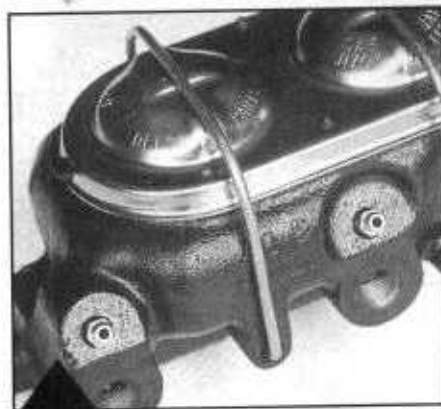
Casting No. 5467084: The '66 dual-reservoir power brake master cylinder has two plastic screw caps, and reads "USE DELCO BRAKE FLUID." This master cylinder is painted semigloss black. The inset photo displays the casting number 5467084, which is located on the side of the master cylinder facing the engine.



Casting 5467084: There are dual 1/4-inch brake lines on the left side without any adapters. The '66 with power brakes has a 1-inch id bore without bleeder screws.

1967

The final mid-year Corvette carried two master cylinders—the standard 5455509 casting and the J56 casting. Visually difficult to distinguish, the main difference is the internal bore of 1 inch on the 5455509 casting, as compared to the high-performance 1/8-inch bore of the 5480346 J56 casting.



Casting No. 5455509: This master cylinder has a 1-inch bore and dual 1/4-inch brake lines that go to a steel block which serves as a low-fluid warning switch, not a proportioning valve. There are dual bleeder screws, one for each line. The body is painted semigloss black. The inset photo displays the casting number 5455509, which is located on the side of the master cylinder facing the engine.

1967 continued...

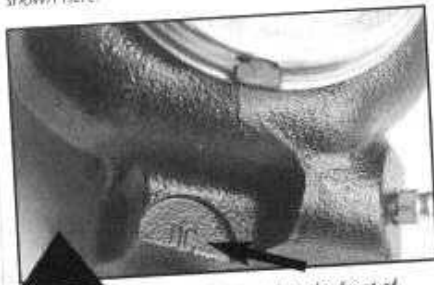
MID-YEAR MASTERS

1967

continued...



Casting No. 5455509: The cover is oval and plated zinc dichromate with an imprint saying "SERVICE WITH DELCO PARTS, USE DELCO SAE J1703 BRAKE FLUID." There is no tunnel between the two humps. The cover is held in place by two ball wires over each hump; the rear wire has a YA bail wire tag on it which is not shown here.



Casting No. 5455509: Stamped on the front of the master cylinder in a semicircle are the letters "DC" (arrow).

1967 J56

The '67 J56 special heavy-duty brakes required the use of a 1/8-inch id bore master cylinder. According to the Corvette Black Book, 267 such RPO vehicles were produced.



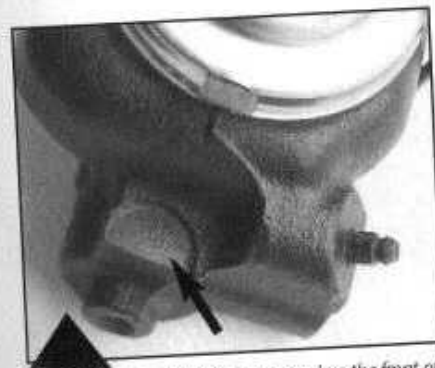
continued...



Casting No. 5480346: The J56 has a 1-1/8-inch bore with dual 1/4 brake lines. The front brake line goes to a low-fluid warning switch and the rear line goes to a proportioning valve. There are dual bleeder screws, one for each line. The body is painted semigloss black. The inset photo displays the casting number, 5480346, which is located on the side of the master cylinder facing the engine.



Casting No. 5480346: Like the '67 standard master cylinder, the cover is oval and plated zinc dichromate with an imprint saying "SERVICE WITH DELCO PARTS, USE DELCO SAE J1703 BRAKE FLUID." There is no tunnel between the two humps. The cover is held in place by two ball wires over each hump; the rear wire has a TG bail wire tag on it which is not shown here.



Casting No. 5480346: Stamped on the front of the master cylinder in a semicircle are the letters "TG" (arrow).

CF

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