

How To Identify And Choose Engine Mounts

Selection isn't only about vibration isolation but also driveline angle, function, and clearance
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Engine mounts exist to provide support and isolate vibration. As the Mustang evolved over the past half century, engine and driveline mount technology has advanced to where high-tech vibration isolation makes the drive smoother and quieter. Fifty years ago, Ford used thick molded rubber stock, which continues to do its job quite well. These days, you have quite a choice of engine mounts for older Mustangs—original equipment rubber mounts, harder urethane mounts, and specially engineered aftermarket mounts designed not only for quiet but also strength.

When the Mustang was introduced in 1964, it had engine and transmission mounts borrowed from the Falcon/Comet, which didn't offer sufficient vibration and sound absorption for a class act like Mustang. If you drive a '65 Mustang with a 289, then hop into a '66 with the redesigned "C6ZZ" engine mounts and you can feel the difference.



1. These are aftermarket '65-'66 170/200ci six-cylinder mounts, which are similar to original equipment. Differences are subtle and determine the engine's installed height. On the left is the convertible mount. Look for the steel lip on the convertible mount plus a dimensional difference.

Vibration isolation and harmonics is a tricky science that requires an understanding of engine mounts and how they evolved during the Mustang's first 14 years of production. For this article, Garrett Marks of Mustangs Etc. hauled out a smorgasbord of '65-'78 Mustang mounts—new-old-stock, aftermarket replacement, used, and urethane—from his inventory and came up with part numbers, applications, and change dates. We learned there were engineering changes along the way intended to improve vibration isolation, safety, cost, and fit. The trick is choosing the correct mounts for your application.

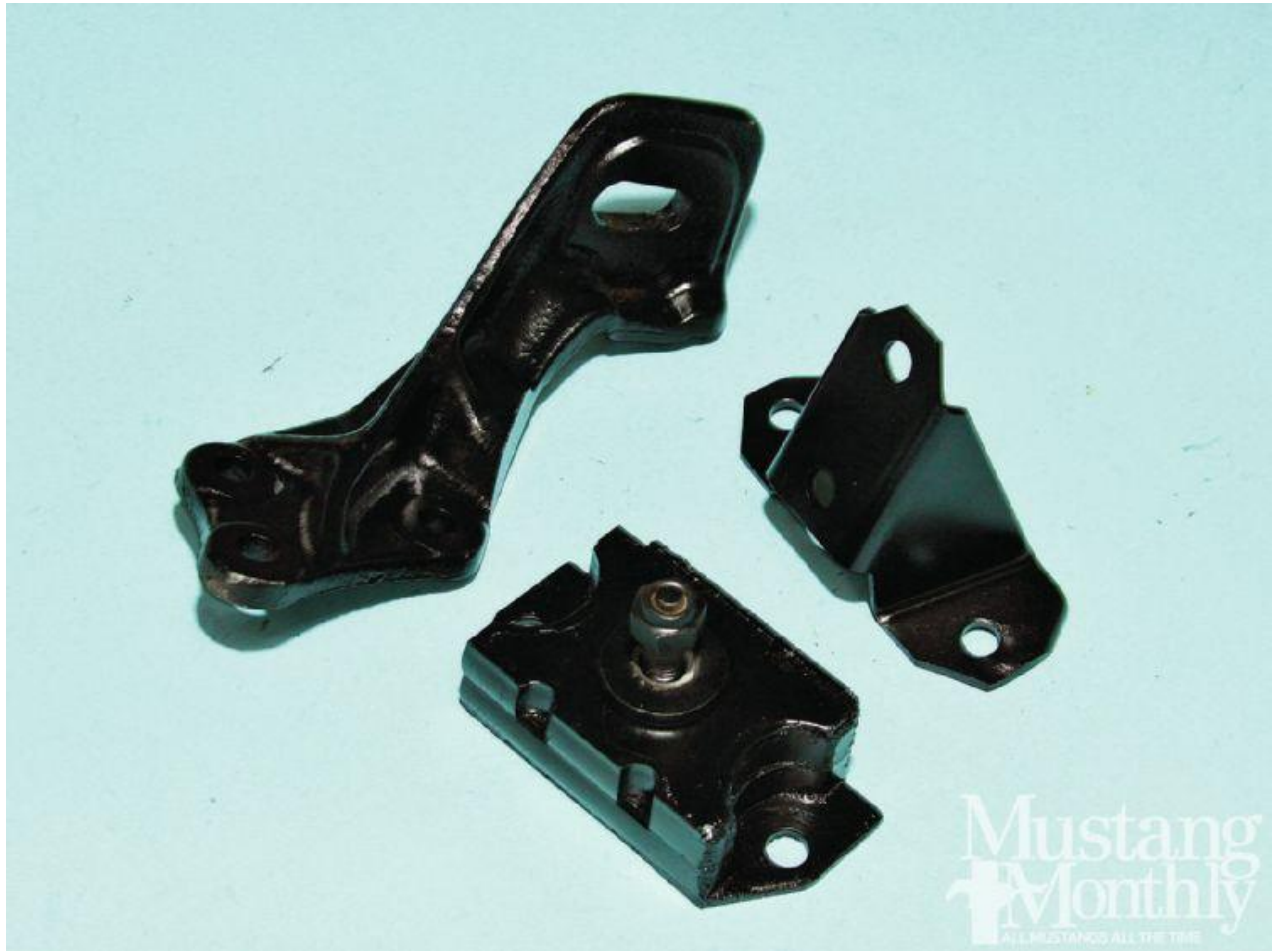
Six-Cylinder Mounts

According to Garrett, six-cylinder Mustang engine mounts and body brackets were cast-iron from '64½ through '70. There were three basic types—'65-'66, '67-'69, and mid-year '69-'70 designed for both the 200 and 250 sixes. Body brackets were stamped steel for '71-'73.

From '64½-'70, there were also two types of six-cylinder engine mounts—one for hardtop or fastback and another for convertibles to lower the installed engine height by ½-inch. It appears the reason for that ½-inch height difference was exhaust pipe and driveline clearances with the convertible body structure.



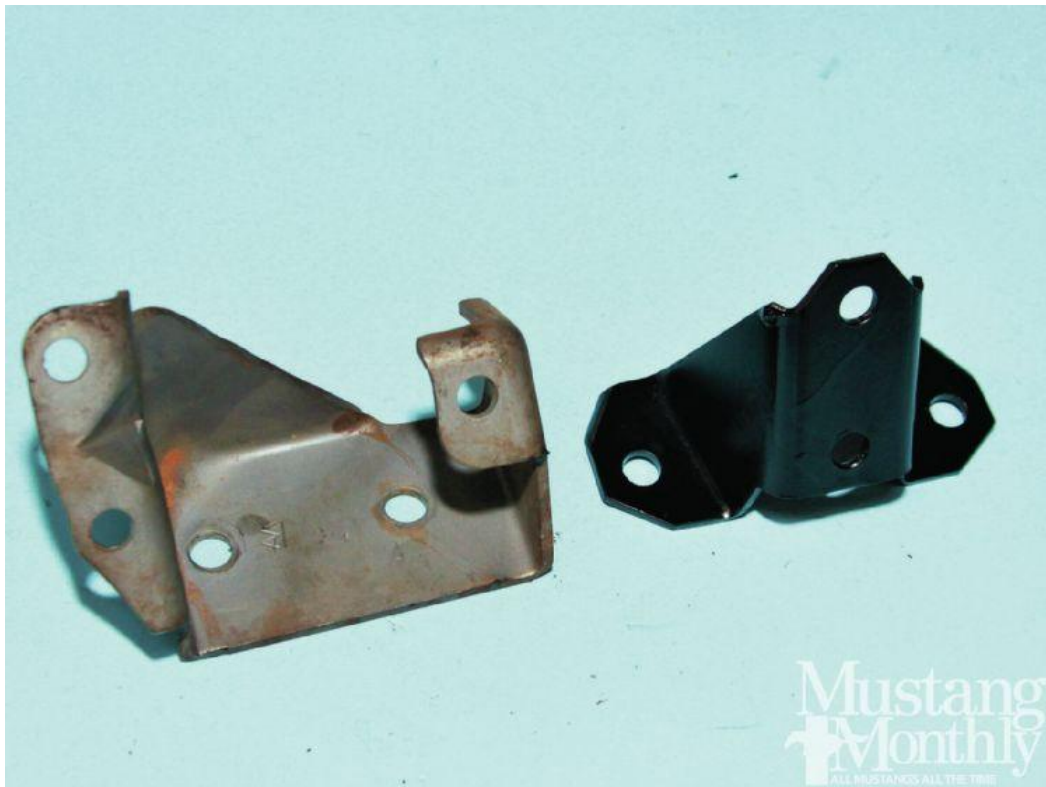
2. Here are six-cylinder cast-iron body brackets for '65-'70 Mustang. From left to right: '65-'66, '67-'69, and the mid-year (3/10/69) redesigned '69-'70 bracket for both 200 and 250ci sixes. Do you see the difference between '65-'66 and '67-'69? The '67-'69 bracket is longer because '67-up has a wider track with frame rails further apart.



3. Here's the '67-'69 200ci six body bracket with mount and block bracket. The 200ci six mount changed for '67 and continued through '69. It is easy to accidentally pick up '65-'66 body brackets thinking you've found '67-'69. If you see C2DZ, C3DZ, or C6ZZ in the casting, you've found a '65-'66 bracket. Look for C7ZZ or C9ZZ for '67-'69.



4. On the left is '67-'69 200ci six-cylinder mount with one stud. On the right is the two-stud mount (C9ZZ-6038-C) for the '69-'70 250ci six, which is obsolete from Ford and not available aftermarket. Your only choice is new-old-stock.



5 These are the 200ci and 250ci engine block brackets side by side. Note the 250-specific mount-to-block bracket (left) with three bolt holes versus two for the 170/200

V-8 Mounts

When the Mustang entered production in early 1964, it was fitted with off-the-shelf parts from Falcon/Comet, including engine mounts and brackets. Owners of '65 Mustangs can use the original Falcon mounts and brackets or switch to the improved C6ZZ versions that were implemented on November 1, 1965. The C6ZZ mount and bracket were a totally new assembly designed to reduce noise, vibration, and harshness along with reduced manufacturing cost. Prior to November 1, 1965, the Falcon-based engine mount was a three-piece affair with a body bracket, mount, and "L" bracket, which didn't do its job as well and was more costly to manufacture. A great advantage with the C6ZZ mount is clearance; it takes up less space, making it ideal for aftermarket headers and 289 High Performance exhaust manifolds.

Where the improved C6ZZ mount gets confusing is its dimensions because there were two types. If you've ever tried to replace small-block V-8 engine mounts in a '67 Mustang or a '68-'70 convertible with off-the-shelf replacements from an [autoZ](#) parts store, you may have discovered this difference the hard way. Although V-8 body brackets look the same at first glance, they're different dimensionally for a reason—installed engine and driveline height, which is a ½-inch difference. Because convertibles have more body structure underneath, it became necessary to develop a body bracket and engine mount combination that would lower the engine's installed height by ½-inch.

Not only do convertibles call for this bracket and mount combination, so do '67-'70 390/428ci big-blocks according to Garrett's extensive research in the Ford Master Parts Catalog. Small-blocks call for this mount for driveline and exhaust system clearance with a convertible's complex underbody structure. With a big-block 390/428 ('67-up), it's the same reason coupled with air cleaner to hood clearance issues.

Because the '71-'73 Mustang is more like the Fairlane/Torino, there's a vastly different engine support system. For '71-'72, engine mounts are the same with stamped steel body brackets and traditional rubber mounts. For '73, federal safety mandates called for sandwich-style mounts, which called for redesigned brackets.



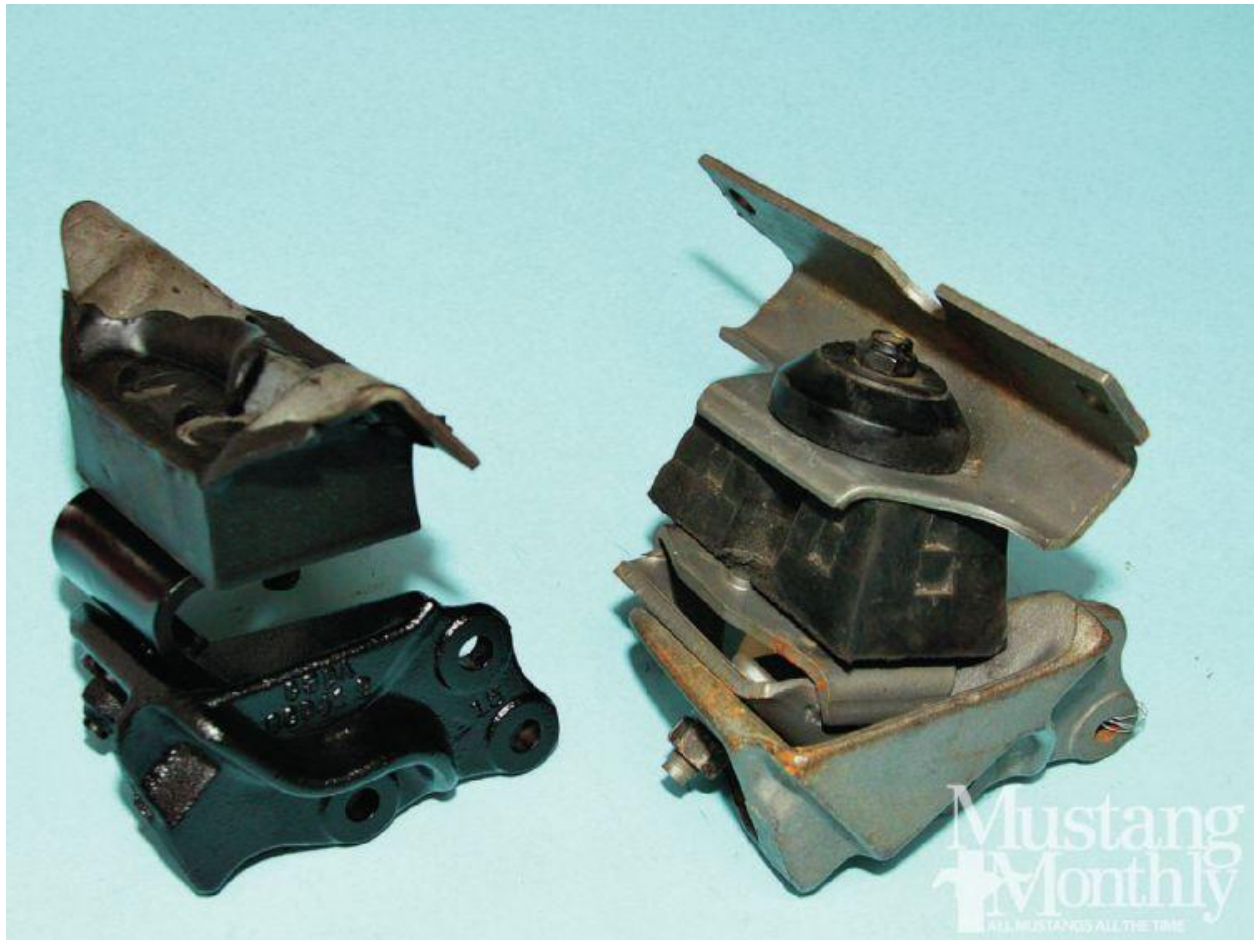
6 The '64-1/2 through early '66 V-8 engine mount, used prior to November 1, 1965, is a simple rubber block with a single anchor stud.



7 Here are the V-8 body and "L" brackets used prior to November 1, 1965



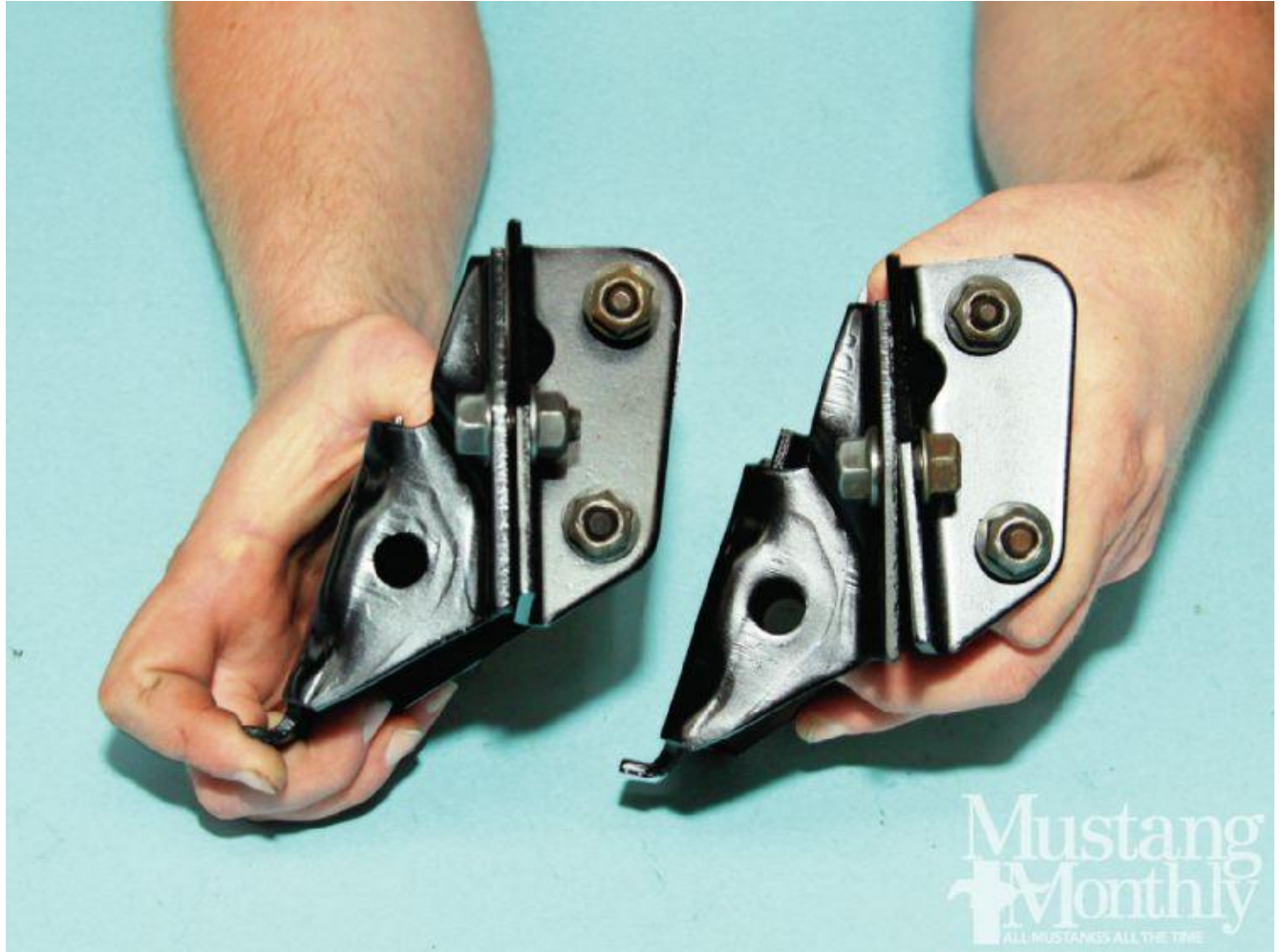
8 Assembled, the pre-November 1 three-piece V-8 mount looks like this. There's also a heat shield that installs between mount and engine block.



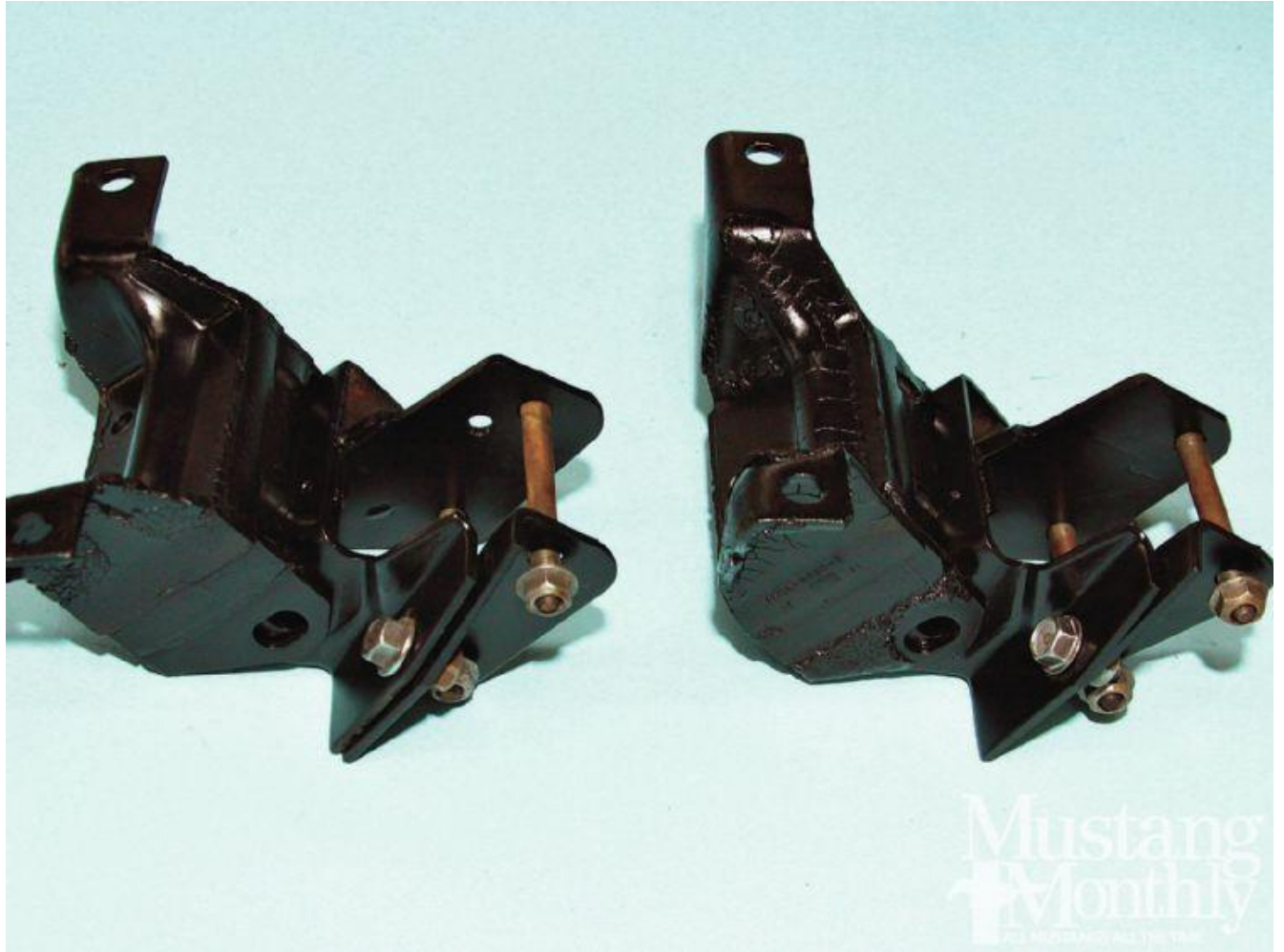
9. Prior to November 1, 1965, the 289 High Performance V-8 received its own heavy-duty five piece mount with two insulators (right) borrowed from the '63-'65 Fairlane parts bin. On the left is the standard V-8 mount to demonstrate the difference.



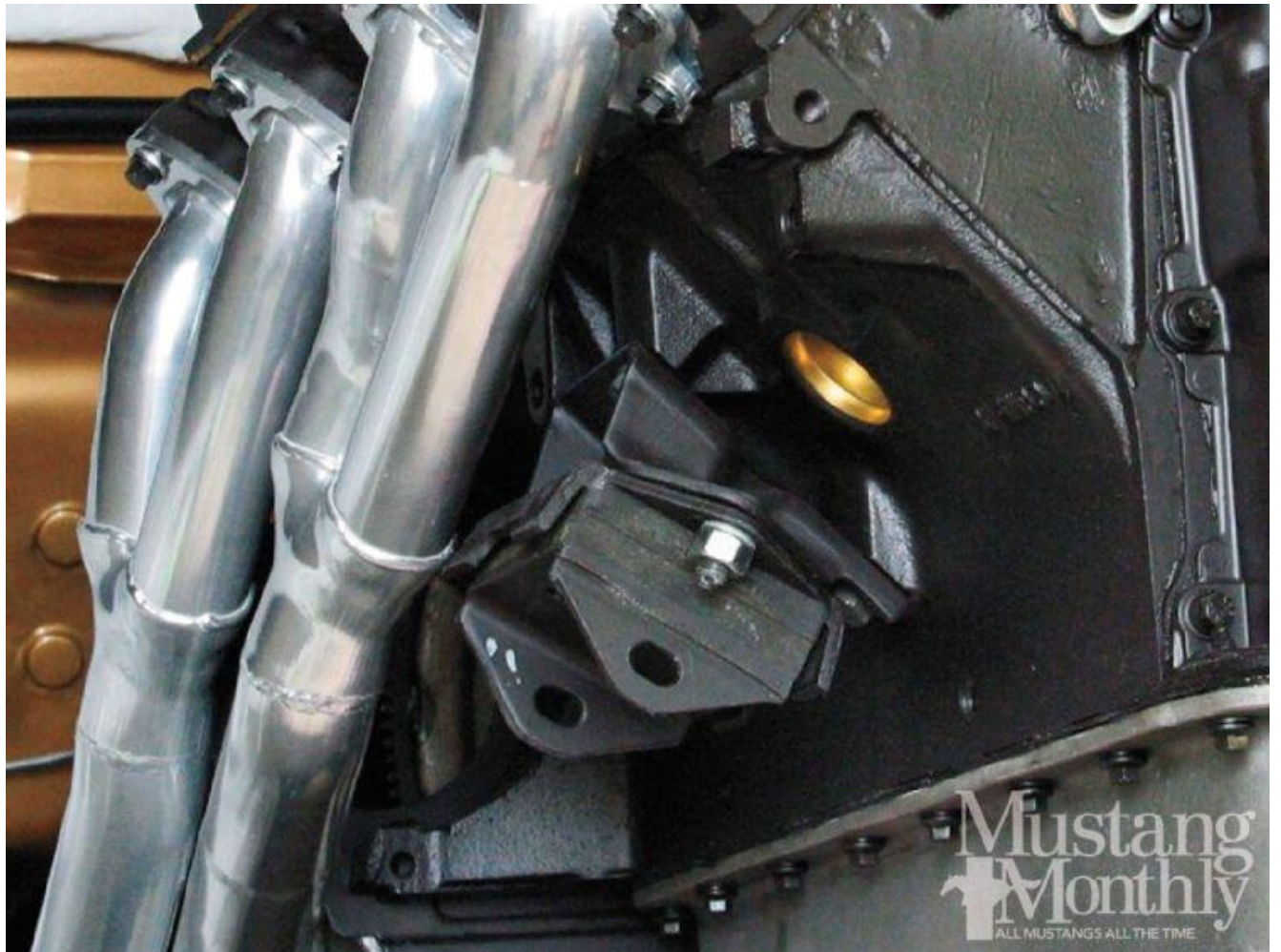
10 This is the two-piece V-8 engine mount and body bracket brought into service on November 1, 1965 for '66 Mustangs. Shown here are aftermarket pieces, including reproduction body brackets, from Virginia Classic Mustang that enable you to retrofit a '65 or early '66 with the improved mount



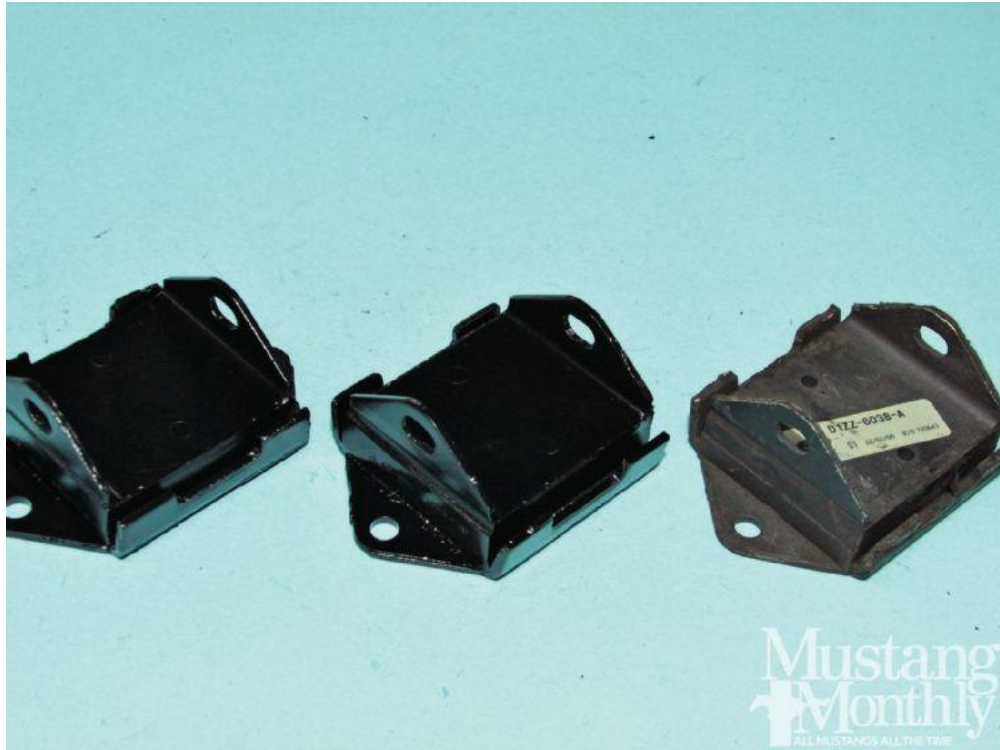
11. Side by side, the difference in body brackets is obvious. Note the different bolt-hole locations, which affects engine installed height. The C7ZZ-6028-B/C7ZZ-6029-B body bracket combo on the left has bolts parallel with the bracket edge for '66 and '68-'70 convertible/big-blocks and Boss which lowers the engine installed height by 1/2-inch



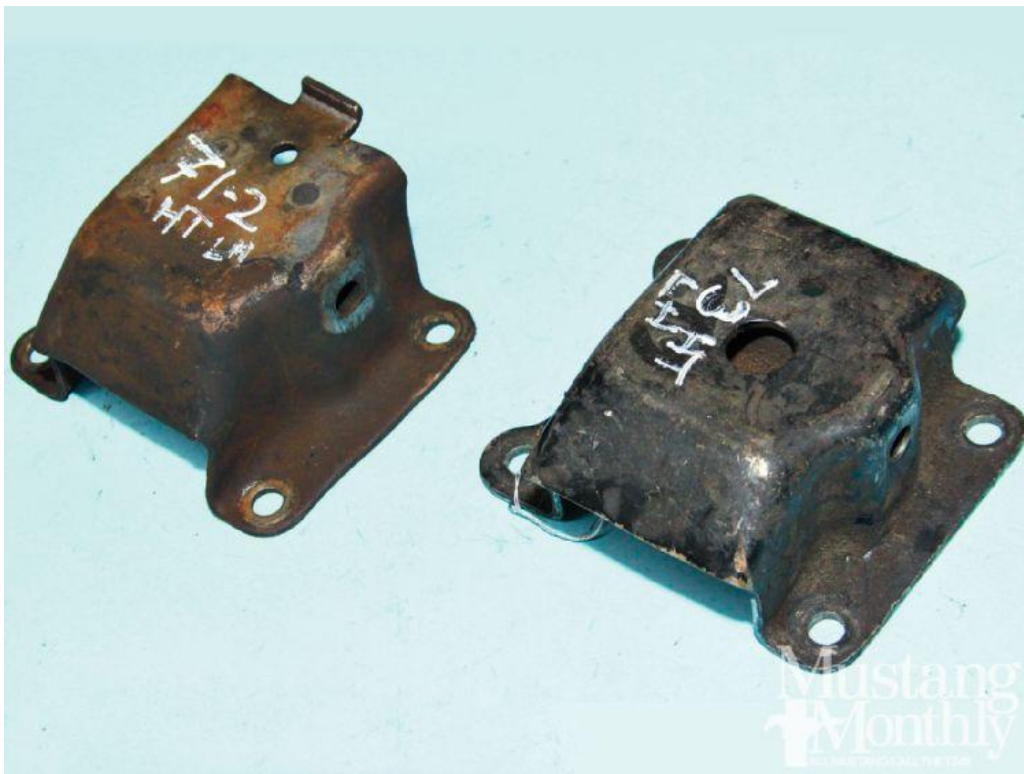
12. Here are the two V-8 brackets fully assembled with mounts. On the left is the '67 and '68-'70 convertible/big-block/Boss bracket/mount combo with the top bolt-hole away from the edge at an angle. On the right is the more common '66 and '68-'70 non-big-block/convertible mount/bracket combo with bolt-holes parallel with the edge. These mounts and brackets are not interchangeable.



13. Installed, the 390/428 engine mount looks like this with a mount-to-block bracket.



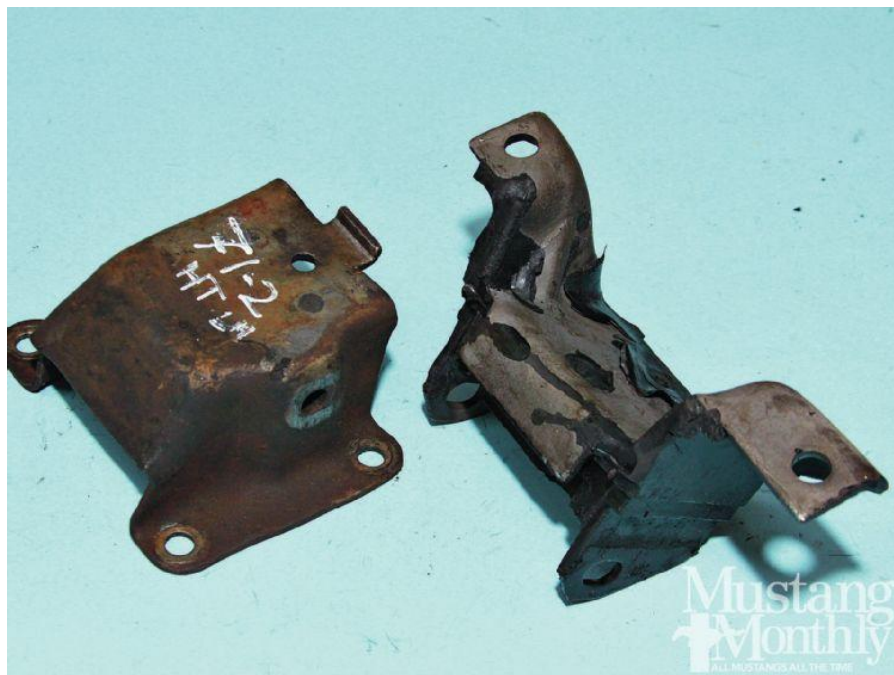
14. Three 390/428 mounts side by side with different Ford part numbers, yet they're all the same dimensionally. The D1ZZ mount on the far right is a Ford service replacement



15. For '71-'72, V-8 body brackets look like this. As with '67-'70, convertibles get a different body bracket and lower engine installed height.

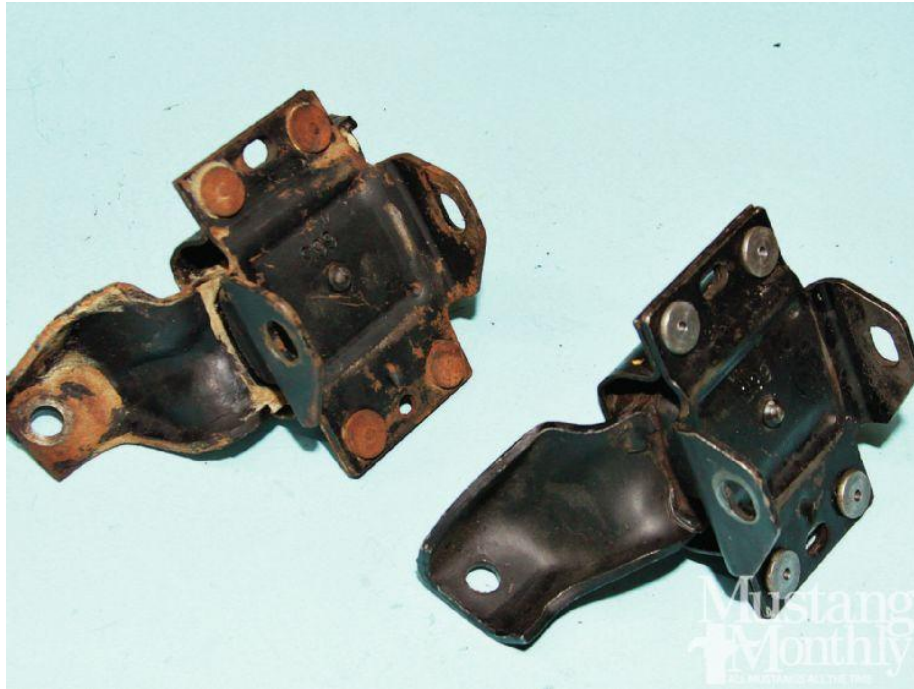


16. These are '73-only body brackets for the sandwich mount. On the right is the convertible body bracket, which lowers the engine 1/2-inch.



1971 1972 Body Bracket Engine Mount For Small Block

17. Here's the '71-'72 body bracket and engine mount for small-block. Though body brackets changed completely, you can still use '66 and '68-'70 non-convertible/big-block/Boss mounts



18. Tougher federal safety mandates called for sandwich-style engine mounts with a safety link that prevented the mount from separating if failure occurred. On the left is a convertible mount. Right is for the hardtop/SportsRoof.



Mounts 1974 1978 Mustang II V6

19. If this doesn't look familiar, that's because it is for '74-'78 Mustang II with the 2.3L four or 2.8L V-6. Like '73, it has a safety link to prevent separation. Mustang II got a V-8 in '75 so it employed a safety

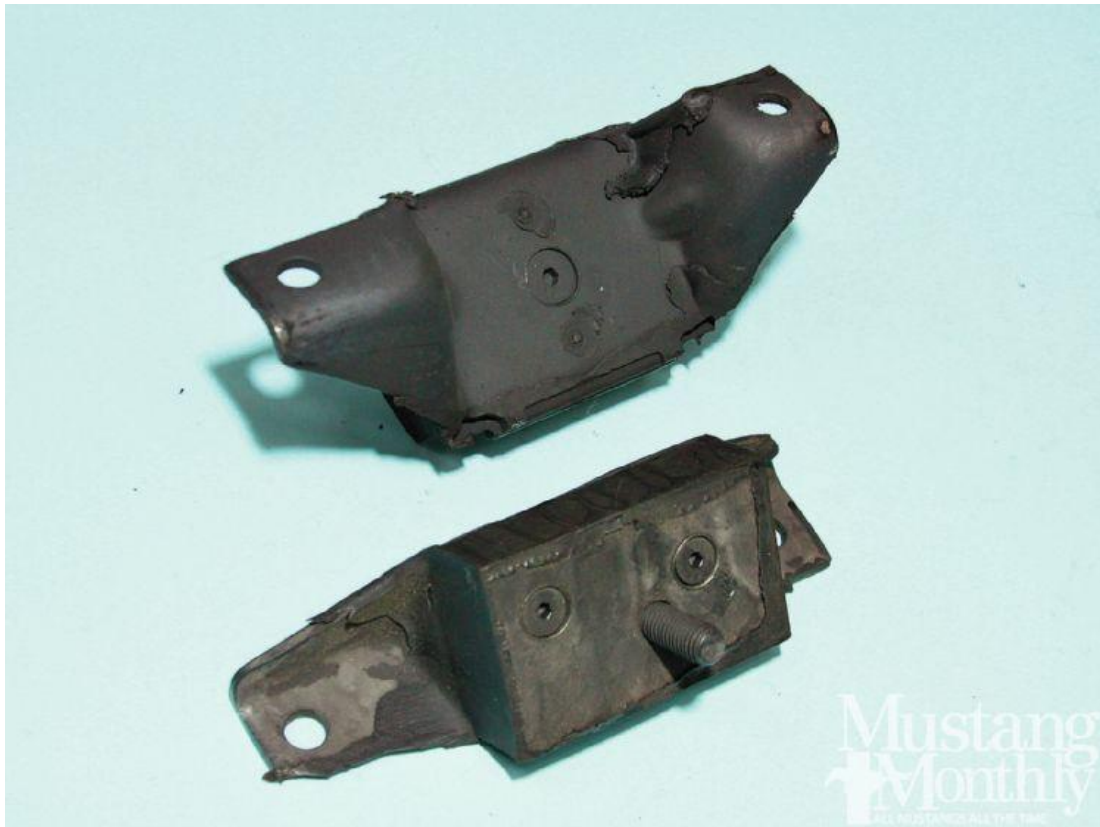
mount similar to '66-'72 but with the federally mandated safety link.

Better Aftermarket Mounts

With better technology has come a crop of aftermarket engine mounts for classic Mustangs. The most obvious types are urethane mounts from Summit Racing, Mustangs Etc., and Mustangs Plus. Summit offers a huge variety of high-quality cadmium-plated urethane mounts from Prothane, which fit the '66 and '68-'70 non-big-block/convertible body brackets. If you have a '67 or '68-'70 with big-block, convertible, or Boss mount brackets, you will have to change the body brackets to achieve a proper fit because the aftermarket generally does not recognize this dimensional difference. Mustangs Etc. carries the Mity Mount from Dyna-Tech Engineering, which is an enclosed safety link mount for '65-'72 Mustangs.

Another option for owners of '73 Mustangs (and '83-up Mustangs with the 3.8L [V-6](#)) is remanufactured engine mounts available on an exchange basis from Mustangs Etc. You provide them with your old mounts and they provide you with a remanufactured piece ready for installation.

Which type of engine mount and bracket combination you choose for your classic Mustang depends largely on how you intend to use the [car](#). A concours restoration calls for factory-style rubber mounts whether they're aftermarket replacements or new-old-stock originals. Your search begins with knowing how your Mustang was equipped in the first place, what will fit, and what will work best for your project.

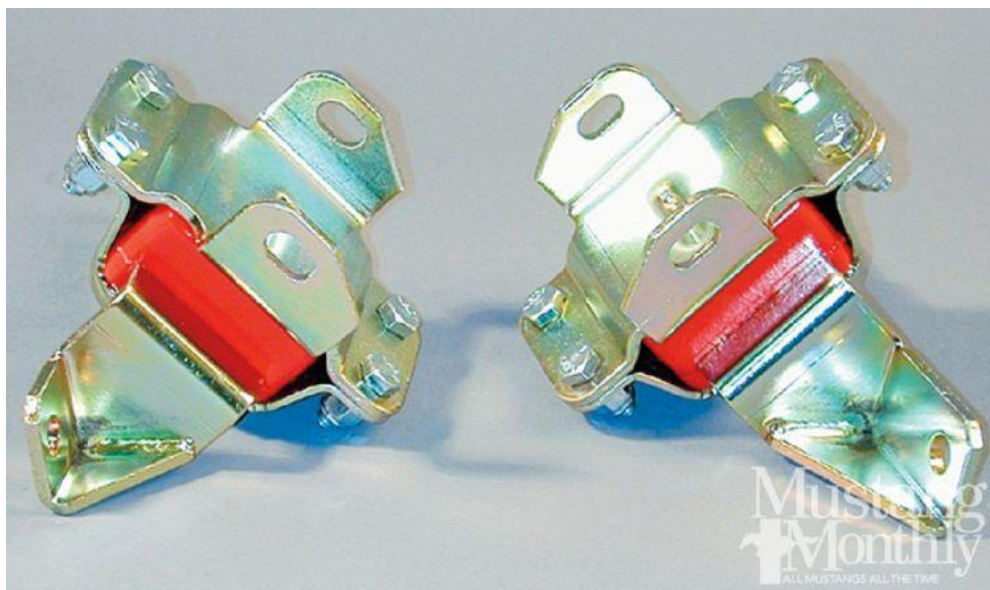


Dyna Tech Engineering Mity Mount

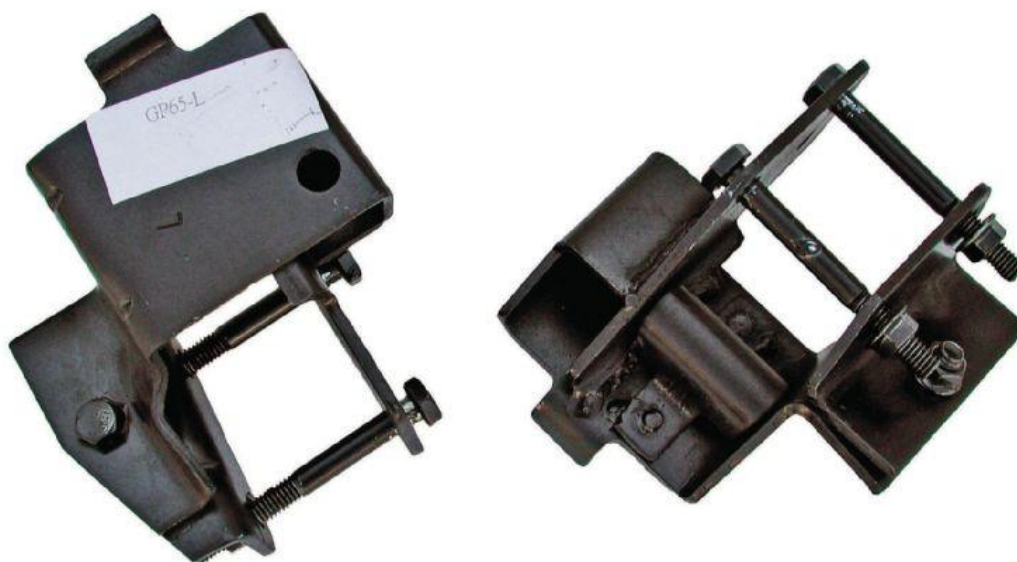
20. The Mity Mount by Dyna-Tech Engineering from Mustangs Etc. for '65 and early '66 Mustang incorporates the safety link. It is also available for '66-'72.



21. These adjustable urethane Ron Morris engine mounts from Mustangs Plus will fit nearly any classic Mustang application.



22. Prothane engine mounts from Summit Racing Equipment offer strength and stability. When you are considering urethane engine mounts, remember they don't offer the same vibration and noise isolation as rubber mounts



23. If you're not concerned with originality, these body brackets from Virginia Classic Mustang enable you to go with 11/1/65-up two-piece [V-8](#) engine mounts. And because these brackets are sized for '66 and '68-'70 small-block, nearly any aftermarket replacement mount will fit