

Ford 9"

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Housing Identification

- 57 - no dimples, flat center band up the center of the rear cover, bottom drain plug.
- 58-59 - two dimples on back of housing, flat center band, some had drain holes.
- 60-67 - two dimples, flat center band, oil level hole in back cover.
- 63-77 Lincoln, LTD, Thunderbirds had 9.375 inch centers, housings were cut away at the gasket surface for ring gear clearance, one curved rib at the front top portion of differential, strong but no aftermarket gear sets.

Strength - There are four usable styles you can find in a junk yard. They range from light duty to extreme duty but in all cases the larger 31 spline axle versions are stronger than the 28 spline version of the same unit.

- The 67-73 Mustang type is considered light duty uses both axles.
- The 57-68 early passenger car and half-ton pickup rear end is considered a medium duty unit and came in both 28 and 31 spline axles.
- The 70-79 Ranchero/Torino are considered a high performance unit again being produced with both 28 and 31 spline axles.
- The 69-77 Galaxie/Lincoln and 73-86 half-ton pickup used both size axles and the 31 spline version should be considered the strongest available and can be used for extreme duty applications.

There are two ways that are used to measure a 9" rear end. The first is to measure from the wheel mounting surface to the same place on the other side. This is the most consistent way as it gives you the distance between the wheel mounting points. The second way is to measure the flange on the housing that the backing plate and axle retaining flange bolt to. This way is not as accurate. The reason that it isn't is because there are different thicknesses of brake shoes that cause the backing plates to move in or out to accommodate the shoe thickness.

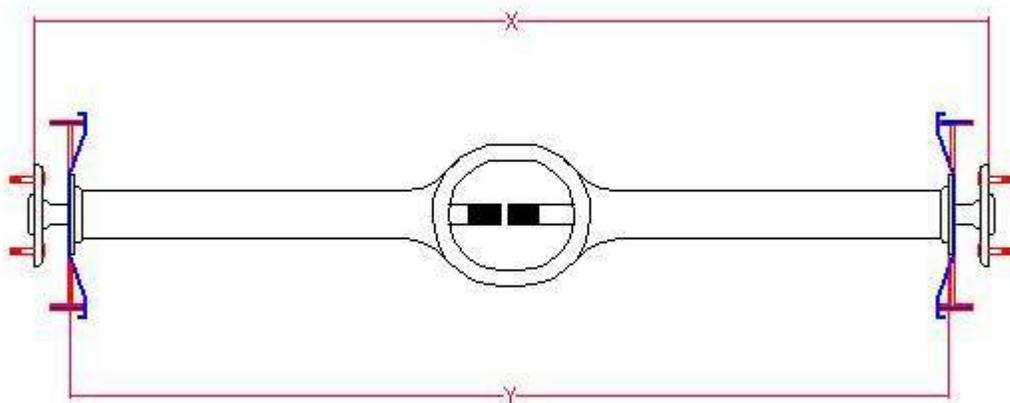
Width: from wheel mounting flange to wheel mounting flange (X)

- 1957-59 Ford - 57 1/4"
- 60-64 Ford 61 1/4"
- 57-59 Ranchero and SW - 57 1/4"
- 1964-71 Full sized cars - 61"
- 1979-81 Lincoln Versailles - 58 1/2"

Width: from housing flange to housing flange (Y)

- 57-59 Ford/Edsel - 52"
- 60-64 Ford/Mercury - 54-56"
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-
-

- 1972-79 Ford intermediate & Full Size - 63"
- 70-79 Ranchero/Torino - 63"
- 57-72 F-100 Pickup - 61 1/4"
- 73-86 F-150 Pickup/78-86 Bronco - 65-65 1/4"
- 66-77 Bronco - 58"
- 1977-86 Ford E-150 - 69 1/4"
- 77-81 Granada/Versailles - 58 1/2"
- 67-70 Mustang/Cougar/Fairlane/Comet/Falcon - 59 1/4"*
- 70-73 Mustang family - 61 1/4"*
- 69-77 Galaxie/Lincoln - information not given but in any case it will need to be narrowed for use in a street rod.
- 70-79 Ranchero/Torino - 56"
- 57-72 F-100 pickup - 57"
- 73-86 F-150 pickup/78-86 Bronco - 58 3/4"
- 66-77 Bronco - 46"
- 67-70 Mustang/Cougar/Fairlane/Comet/Falcon - 52-54"
- 70-73 Mustang family - 54"
- 58-60 Thunderbird - 50"
- 65-66 Mustang - 52"
- 66-69 Cyclone - 52"
- 61-67 Thunderbird - 56"



X in the picture about denotes the measurements listed above left. Y in picture above denotes the measurements listed above right

* Denotes a gray area involving some of the earlier parts being found on 70 Model year cars.

Note: After 1970 all axles were the 31 spline style big axles. For 28 spline units the last 4 inches were machined down for the 28 spline ends. If you shorten the axles more than 4 inches they are big enough to take 31 spline.

Conversion from 28 Spline to 31 Spline | [Back to top](#)

To change the third member to 31 spline, the only parts needed are the differential side gears, they are available from Ford, about \$20 apiece. The other part of the conversion is the carrier bearing size. There are two carrier bearing inside bore sizes, and two carrier bearing outside bore sizes. There are three possible combinations, small ID-small OD , large ID-small OD , and large ID-large OD. Factory 31 spline axles came with the last two bearing configurations, but not with the first. On 28 spline carriers, the axle bore on some of them are not large enough to allow the 31 spline axles to pass through. The carriers with the large ID bearings can be bored out to use the 31 spline axles. Not a

precision job, just big enough for the axle to pass through, I use a cut off end from a 31 spline axle to check when it's large enough. I takes less than an hour to do both sides, and could be done at a vocational school by a novice. The small ID bearings won't have enough material left for reliability if bored out for 31 spline axles. Also if your housing has the small axle bearings, you will have to have axles custom made, as there are no factory axles with 31 splines, and small axle bearings. Both the large axle bearing, and the extra large axle bearing (some F150 trucks) had 31 spline factory applications. From about 1970 on, the big Fords, Mercury's, and Lincoln's has axles big enough to respline with 31 splines if they are shortened about 4" per side. Both 4 1/2" and 5" bolt patterns are available. If you want to redrill to a 4 3/4" Chevy bolt pattern, use truck axles, as there is more room for the new pattern without hitting the other holes. The drum pilot may have to be turned down, depending on the drum used. The Chevy drums of corresponding size to the ford brakes will fit if the pilot is turned down.

Converting manual adjusters to later model auto-adjuster brakes | [Back to top](#)

Use Wagner #283 shoes, drilled for the self adjuster mechanism, use Wagner self adjuster kit F98370/1, and wagner Combikit F87351. That should supply all the parts you need. These parts are listed for a F100 with 11" by 1 3/4" brakes.

Pinions | [Back to top](#)

Daytona Pinions first available on with 63-64 427 full size cars, and other rare ultra Hi-po cars.

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Below are 2 tables showing the codes from the tag on a ford rearend the code will tell you if it is a 8 or 9 inch and what ratio is supposed to be in the carrier

[[8 inch](#) | [9 inch](#)]

8 inch ID tag numbers					
ID tag	Ratio	Ring Gear Diameter (in)	ID tag	Ratio	Ring Gear Diameter (in)
WCZ-E	2.80:1	8	WCZ-F	3.00:1	8
WCZ-F1	2.80:1	8	WCZ-G	3.50:1	8
WCZ-V1	2.79:1	8	WCZ-W	3.25:1	8
WDW-Z	3.00:1	8	WDJ-B	2.80:1	8
WDJ-C	3.00:1	8	WDJ-C1	3.00:1	8
WDJ-C2	3.00:1	8	WDW-AB	2.79:1	8
WDY-AA	3.00:1	8	WDY-HH	3.40:1	8

WFL-A	3.00:1	8	WDY-S	3.40:1	8
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9 inch ID tag numbers

ID tag	Ratio	Ring Gear Diameter (in)	ID tag	Ratio	Ring Gear Diameter (in)
WDM-AH	3.25:1	9			
WCZ-S	3.50:1	9	WCZ-T	3.50:1	9
WDC-DW	2.75:1	9	WDC-EB	2.75:1	9
WDC-EE	3.00:1	9	WDC-EH	2.75:1	9
WDC-EK	3.00:1	9	WDC-EL	2.50:1	9
WDC-EM	2.50:1	9	WDX-E	2.75:1	9
WCZ-H	3.89:1	9	WCZ-J	4.11:1	9
WCZ-P	3.50:1	9	WCZ-R	3.89:1	9
WFU-E	4.30:1	9	WEB-BF	2.50:1	9
WEB-BK	3.00:1	9	WEB-BM	2.75:1	9
WES-F	3.00:1	9	WES-G	3.25:1	9
WES-H	3.50:1	9	WES-J	3.89:1	9
WES-K	3.50:1	9	WES-M	3.25:1	9
WES-N	3.00:1	9	WES-P	3.25:1	9
WES-R	3.25:1	9	WES-T	2.75:1	9
WES-T1	2.75:1	9	WES-U	3.50:1	9
WES-V	3.00:1	9	WES-Y	3.50:1	9
WES-Z	3.00:1	9	WES-AA	3.00:1	9
WES-AB	3.25:1	9	WES-AC	3.00:1	9
WES-AD	3.25:1	9	WES-AE	3.50:1	9
WES-AG	2.75:1	9	WES-AH	3.00:1	9
WES-AJ	3.25:1	9	WFA-AA	3.00:1	9
WFA-AH	3.00:1	9	WFA-AL	2.75:1	9
WFB-A	3.25:1	9	WFB-C	3.25:1	9
WFB-D	3.00:1	9	WFB-G	2.50:1	9
WFB-K	2.50:1	9	WFD-A	3.50:1	9
WFD-B	3.91:1	9	WFD-C	4.30:1	9
WFD-D	3.91:1	9	WFD-E	4.30:1	9
WFD-F	3.50:1	9	WFD-J	3.25:1	9
WFD-K	3.00:1	9	WFD-L	3.00:1	9

WFD-M	3.25:1	9	WFG-AL	3.00:1	9
WFG-AA	2.75:1	9	WFG-BJ	2.75:1	9
WFV-T	2.75:1	9	WFY-A	2.75:1	9
WFY-K	3.00:1	9	WGB-V	2.75:1	9
WGB-W	3.00:1	9	WGB-AB	2.50:1	9
WGB-AD	2.75:1	9	WGC-A	2.75:1	9
WGC-K	2.50:1	9	WGC-N	2.75:1	9

Mustang II 4 Lug to 5 Lug Conversion Interchange

Ok, here is what I know. There is no direct interchange to a 74 to 77 Mustang II 8" rear.

1. However, the axles in a Maverick are 17/64" shorter on the right side, and 9/64" shorter on the left side. These will probably work.
2. Better yet, the axles from a 63 to 65 Falcon, Comet, or Fairlane, or a 64 to 66 Mustang with 8" axles are 1/4" too long on the right side, and 3/8" too long on the left side. Measuring several axles I found all of them had enough splines to be shortened this much. And it doesn't have to be done on a lathe, it could be done with a Skil saw and abrasive wheel, then rechamfer the end of the axle.
3. Also 57 to 59 Ford with a Non-heavy duty axle, everything except police, taxi, wagons, ranchero, and some convertibles, are 9/16" too long on the right, and 3/8" too long on the left. Again the axles can be shortened that much without hurting the spline length. The wheel bearing to flange length on all these are the same, and Maverick drums will work with the Mustang II brakes. All of them use the same wheel bearing, and bearing retainer. The bearing collar on some is different OD, but will interchange on the axles.
4. I suspect, that Granada and Monarch axles will fit with minor shortening also, they are in the range of the 57 to 59 ford, but I couldn't find a listing in the books I had.

Ford 8.8 Rearend info

Ford 8.8 decoding info

Tag Code RxyZZx88xxxx

y L = posi, not L = not posi

R.ZZ Ratio

88 Size (8.8)

x Not important

Ford 8.8" with drums is 28 splines axles. The 8.8" with disks is 31 spline axles and the stronger of the two.

That's what I know.

Disclaimer

Keep in mind that Ford made the 9" unit for 29 years and it came in dozens of varieties. One rule of thumb is that if it has disk brakes it also has 28 spline axles. These are the weaker of the two.

- Classic Concepts

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- Frank Kocinski II AKA RRT-enjenjo
 - Hayes Lowe AKA RRT-Halowe

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Any questions or comments email me Frank at tech@hiqrods.com



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