

## A-833 CHRYSLER 4-SPEED PARTS

### CHRYSLER'S A-833 4-SPEED TRANSMISSION

It is of utmost importance that you determine which year of production and which version of transmission you have. Several large components and many small parts are no longer available as service parts. Some parts are not interchangeable from year-to-year due to modifications and updates. Most cars have had transmissions, clutches and shift components removed, swapped or modified over the years, so you may not have the original transmission in your car.

The Chrysler 4-speed was introduced during the fall of 1963 for the introduction of the 1964 models, and has since been produced in several different versions with various updates and modifications.

The A-833 operates basically the same regardless of model or application. It was available in two different lengths; A/F body (short) and B/E body (long). Both coarse and fine pitch gears were used along with four different production ratios. From an interchangeability standpoint there are basically three versions: small spline, large spline and overdrive. The small spline was used in all body styles and with all engines except 440 and 426 Hemi (which used the large splines). The overdrive version was introduced in 1975.

All small spline drive pinions (input shaft) have 23 splines, while large spline pinions have 18 splines. Clutches used with each style drive pinion must have the corresponding number of splines. There are also three drive pinion bearing retainer pilot sizes that serve as a basis for identifying transmissions. The pinion bearing retainer is the cast piece bolted to the front of the transmission that fits into the round hole in the rear of the bellhousing.

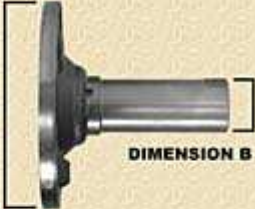
Check the following table to identify the retainer size and corresponding drive pinion bearing in your transmission.

**IF PERFORMING YOUR OWN MECHANICAL WORK, WE HIGHLY RECOMMEND THE PURCHASE OF A FACTORY SERVICE MANUAL FOR YOUR CAR.**

### FRONT BEARING RETAINER DIMENSIONS

Chrysler Part #	Dimension A	Dimension B
3410395	4.354"	1.248"
2892256	4.807"	1.248"
2960122	5.125"	1.248"
2801892	4.807"	1.417"
3878596	5.125"	1.248"

**NOTE: Larger 'B' diameter requires Hemi release bearing.**  
*Part numbers above given for reference only.*

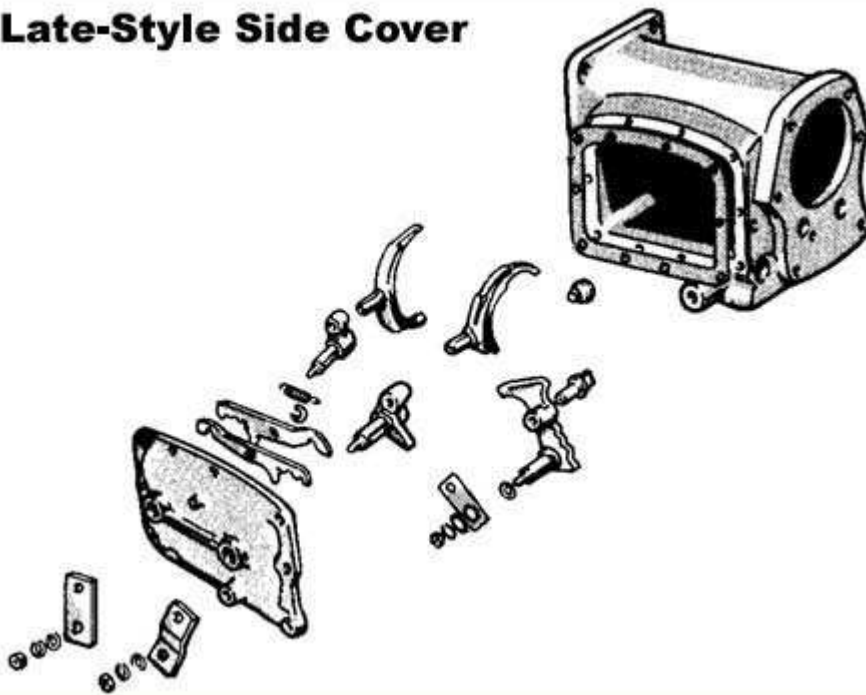


Another important feature to note is the shifting mechanism and side cover. Two types of shifting mechanisms were used and they can easily be distinguished by the side cover arrangement.

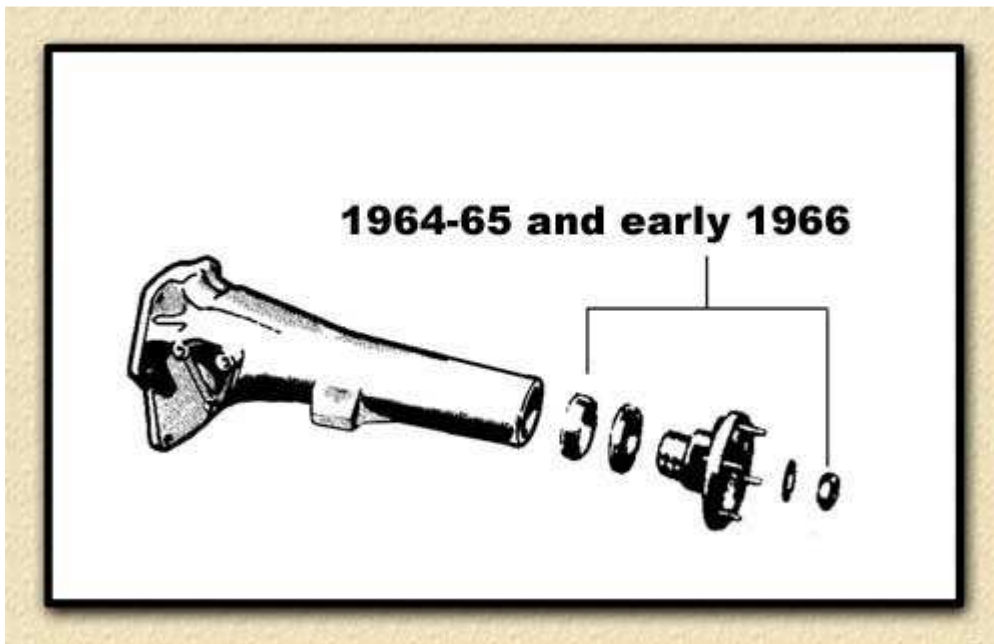
### Early-Style Side Cover



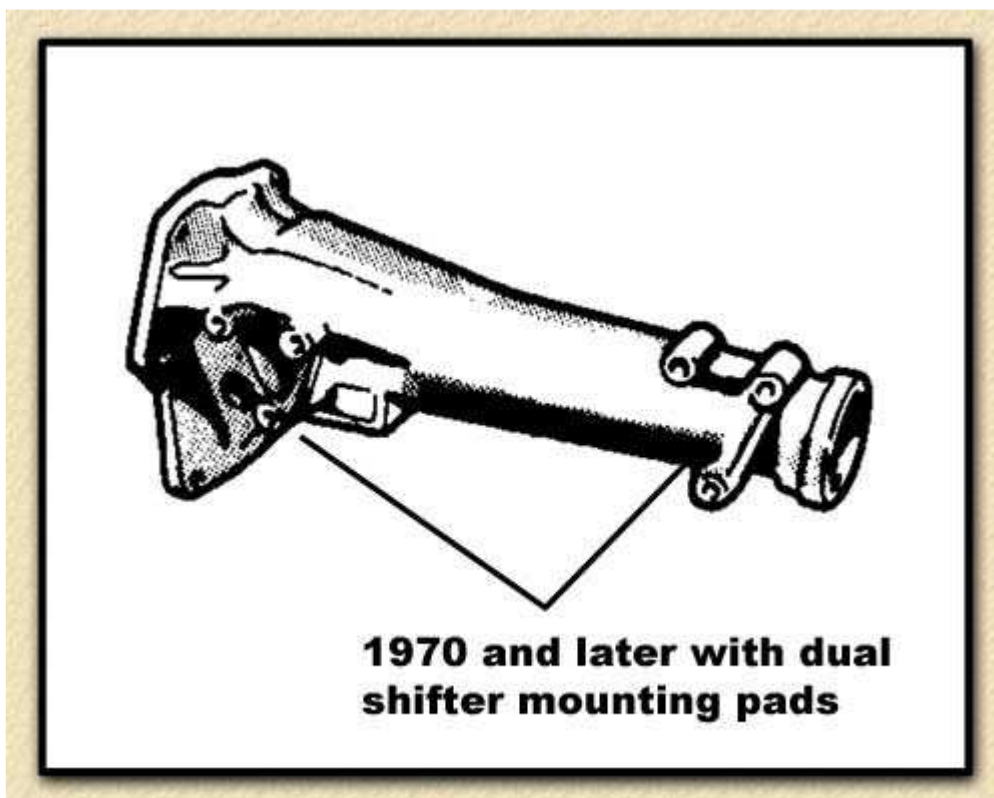
### Late-Style Side Cover



The double lever interlock side cover assembly was introduced in late 1970 on the AAR 'Cuda and T/A Challenger and was used on all transmissions from 1971-74. The older ball and detent unit was used on all 4-speeds prior to the aforementioned change. The newer double-lever interlock unit is interchangeable with the older units and vice versa if all pieces of the side cover assembly and shifting mechanisms are transferred. This situation is useful since drag racers generally prefer the earlier version and street drivers the newer style.



1964, 1965 and some early 1966 models are easy to identify because of two unique features. These versions are readily spotted by their ball and trunion U-joint flanges and small speedometer pinion adapter.



1970-and-later transmissions used in B- and E-body models are easy to

identify because provisions were made into the tailshaft housing for mounting the external shifting mechanism and handle in two different locations. In addition, the transmission mounting pad is positioned lower and further forward than earlier models.

#### NUMBERS MATCHING

For those interested in a numbers-matching car, the last 8 digits of the V.I.N. number can be found on the passenger side of the transmission case on 1968-and-later cars. As a side note, the entire 13 digit V.I.N. number appeared in 1969 only.

Several sets of gear ratios were used through the years. Consult the table below showing gear ratios for both coarse and fine pitch gears.

### CHRYSLER A-833 TRANSMISSION RATIOS

<b>Fine Pitch Gears</b>	<b>1st</b>	<b>2nd</b>	<b>3rd</b>	<b>4th</b>
<b>Small Spline (1970-and-earlier models)</b>	<b>2.66</b>	<b>1.91</b>	<b>1.39</b>	<b>1.00</b>
<b>Small Spline (1970 AAR &amp; T/A &amp; 1971-74 models)</b>	<b>2.47</b>	<b>1.77</b>	<b>1.34</b>	<b>1.00</b>
<b>1964-65 slant-6, 273 V8 &amp; 1974-75 318 V8</b>	<b>3.09</b>	<b>1.92</b>	<b>1.40</b>	<b>1.00</b>
<b>1975-&amp;-later Overdrive models</b>	<b>3.09</b>	<b>1.67</b>	<b>1.00</b>	<b>0.73</b>
<b>Coarse Pitch Gears</b>	<b>1st</b>	<b>2nd</b>	<b>3rd</b>	<b>4th</b>
<b>Large Spline (1970-&amp;-earlier models)</b>	<b>2.65</b>	<b>1.93</b>	<b>1.39</b>	<b>1.00</b>
<b>Large Spline (1971-74 models)</b>	<b>2.44</b>	<b>1.77</b>	<b>1.34</b>	<b>1.00</b>
<b>1967-68 Super Stock Hemi</b>	<b>2.65</b>	<b>1.64</b>	<b>1.19</b>	<b>1.00</b>

The following table is a listing of the number of gear teeth for the various production 4-speeds. This table is especially helpful when purchasing parts or assembling a transmission from several used units.

## CHRYSLER A-833 TRANSMISSION GEAR TEETH

MAIN SHAFT GEARS					COUNTERSHAFT GEARS			
Low Gear Ratio	Direct	3rd	2nd	1st	Direct	3rd	2nd	1st
2.44	22	26	30	33	26	23	20	16
2.47	25	29	34	35	30	26	23	17
2.65	21	26	30	33	27	24	20	16
2.66	24	29	34	35	31	27	23	17
3.09	22	27	32	35	33	29	25	17
2.65 Red Stripe	21	24	28	33	27	26	22	16
3.09 Overdrive <sup>1</sup>	22	18OD	30	35	33	37	27	17

*<sup>1</sup>NOTE: Normal 3rd gear becomes the 0.73 ratio in Overdrive units, 4th remains direct (1.00 ratio). Shift pattern remain the same because the 3rd-4th shift lever is inverted. The o.d-4 transmission is essentially a gearset change in the A-833 4-speed manual transmission.*

Please note that many swaps are feasible within the Chrysler manual transmission family. Clutches, bellhousings, throwout bearings and flywheels differ in several aspects from year-to-year.