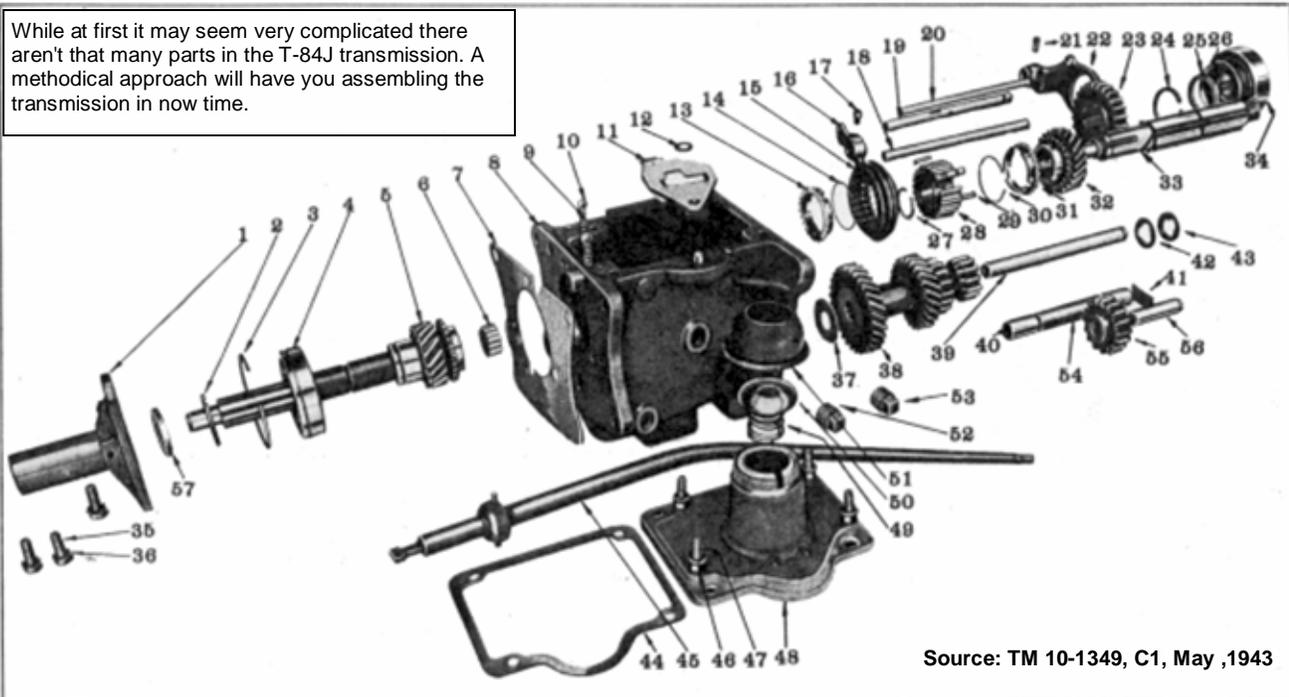


BEFORE YOU BEGIN...

While at first it may seem very complicated there aren't that many parts in the T-84J transmission. A methodical approach will have you assembling the transmission in now time.



Source: TM 10-1349, C1, May ,1943

Before you begin you will, of course, need to remove the transmission from the jeep. Removal of the transmission will not be covered here but can be found in the manuals.

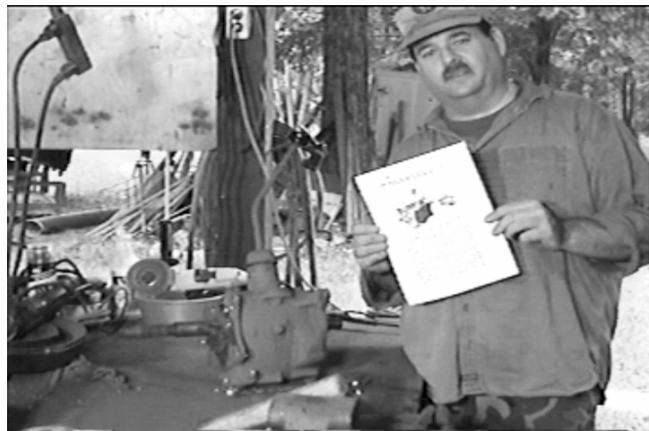
There are a number of manuals available



Source: National Archives

There's a number of steps you should do before beginning the tear down of your transmission. Use TM 9-1803B for the instructions necessary to remove the transmission.

from originals to reprints. One of the manuals available is **The Jeep Complete**. Which contains the three most important manuals available to the WW2 jeep enthusiast—TM 9-803, TM 9-1803A and TM 9-1803B. It's a good idea to have a copy of the TM 9-1803B as this covers the powertrain of the Willys MB/Ford GPW. During the rebuild presented in this book, I used



Before you begin the rebuild project you need to have the basic tools and manuals. Here the author is holding printouts from TM 9-1803B available on CD.

TM 9-1803B pages printed from a CD available from www.military-media.com to use in the garage. Some will argue that it's crazy to purchase the CD because you can't take it to the garage with you. That's correct but you can print out the few pages you need and take them with you. Then the argument goes that it will cost you a fortune to print out ALL those pages. Will that is part of the secret, you don't need to print out the **whole** manual, only the pages you need to do the task at hand. The other part of that secret is that you can print them out as many times as you want. So if a grease covered thumb blots out an important instruction—no worries—just clean your hands and print out another copy. This is exactly how I do my rebuilds—*now*.

In earlier days, I bought expensive manuals and took them into the garage and proceeded to get them lathered up in grease or otherwise damaged. You too? I still regret taking my OD colored reprinted man-



This may look somewhat like an Allen wrench but it is NOT. Basically it is a fluted wrench. These tools are available from various jeep parts dealers for approximately \$5 to \$10.

ual into the garage. Those were printed, I don't know, some time in the 1970s. They appear to be fairly rare based on the price of them on www.ebay.com.

You will also need to have some basic tools. Typical set of wrenches (SAE standard sockets not metric, just in case you were wondering), sockets, snapping pliers, etc. A **Bristol** wrench is required to remove

and install special purpose screws. The Bristol wrench can be obtained from a number of suppliers, I suggest Ron Fitzpatrick. Joel Gopan has reminded me that over the course of 60 years OTHER types of special screws were used that had different types of heads...you won't know until you have tried to get them out! But try the Bristol wrench first.¹¹

You should have some small and large sizes of brass drifts. These are much better for "pounding on" than the actual part or even worse—screwdrivers. The one's I used were rather inexpensive and purchased from www.jcwhitney.com and www.northerntool.com

It is useful to have some pieces of wood. A clean block of wood can come in handy (something on the order of a 12 inch long 2x4 seems to work for me.) You might be surprised at how a simple block of wood can be used as a tool.

A tool that really makes the transmission assembly easy, the **cluster shaft tool**, should be made before you begin (although you can get by with other methods. This tool is fully covered on page 18.

In the exploded view on the previous page, you can see that there really aren't all that many parts in the T-84J. Nothing overly complicated that the average shade-tree shouldn't be able to assemble. Some of the parts may require farming out for bushings pressed and reamed but that's usually no big deal.

CAUTION: Working with machinery can be dangerous, please use common sense and use safe practices. Be sure to wear eye and ear protection. Use tools as they were designed to be used. Using screwdrivers can be hazardous.

Good luck with your rebuild, I think you will find it is not all that difficult.