

CLUTCH BEARING RELEASE SPRING-A QUICK FIX -By *Tim Daley*

If you are having trouble with your Ford N-Series Tractor clutch pedal sticking or not returning to the standard 'UP' position, and you don't have the time, money, or both to split tractor to get to the transmission housing, here's a cheap, band-aid procedure to get a temporary quick fix in place to help solve that problem. Parts needed are minimal so won't cost much either –usually under ten dollars, but you may already have them handy.

First, there are two springs on the clutch plate, part number 9N-7562 that assist in releasing the clutch pressure plate and bearing. They also help when returning the clutch pedal to the normal 'UP' position when released. They are positioned 180° apart, one on the left and one on the right side of the clutch release shaft. One or both of these springs may come loose or break. As that happens, the clutch pedal will stick in the 'DOWN' position when depressed.

When you are using the clutch a lot it becomes a problem. You need to constantly use your toes on your left foot to raise the pedal back up. This is a potential safety issue because if you are shifting gears as from reverse to forward again, when the pedal pops up, the tractor can jolt on you. Even with the throttle set low or at idle, the tractor will surge.



FIG 1 – Clutch pedal sticking Quick-Fix.

Shown below are the parts you will need to do this job. Total installation time is less than ten minutes. Time spent acquiring the parts will depend on what you already have available and what you may need to purchase. I used a utility spring, $\frac{3}{4}$ x 3-1/2 x .062, purchased at my local hardware supplier. To secure the spring in place I used two heavy duty plastic wire ties and an old rear lamp wiring clip, part number 9N-17668. Shown in **FIG 2** are the parts I used.



FIG 2 –Parts List –one 3-1/2” HD spring; two HD wire ties; and one lamp wiring clip. You’ll also need a 5/8” wrench and a pair of wire cutters.

Once you have the parts needed, remove one of the transmission top cover bolts to fasten the wire clip down with –see **FIG 3**.



FIG 3 – Assembling the parts.

Next, take one of the wire ties and feed it through one end of the spring, loop it together, then slip it over the clutch pedal. Pull tight but keep a little slack in it until the other end is secure. Use the other wire tie to feed through the wire clip, and then continue on through the hooked top coil of the spring. Once both wire ties are in place, perform a simple test by pressing the clutch pedal down and observe if it returns back up on its own with the new spring in place. If you are confident all is well, you can begin to tighten up the wire ties and clip off the excess with your knife or wire cutters.

Finally, you'll most likely do a test run after you finish the project but the final test will be when you put the tractor to work like plowing snow and you are in an actual working condition. I keep an extra spring, lamp clip, and two wire ties in my tractor tool box in case I need to make a quick repair in the field or on the road. The spring kit I bought contained two springs so that was convenient. I already had numerous original rear lamp clips, so I took one that was fairly robust. I also had several sizes of wire ties in my electrical toolbox so I only needed to purchase the springs.

At my new house I keep my 1948 8N tractor parked here outside my bedroom window and tarped. I don't have a garage or shed big enough yet so this is the next best thing. My shop/barn is about 6 miles away so I keep the 8N tractor here, mostly for snow plowing in the winter. Once the weather warms up, I will take the tractor over to the farm and begin to tear it down in order to repair the clutch springs properly. Be aware that this 'quick-fix' method is only a band-aid put in place until I can tear it down. I don't recommend anyone keeping it like this forever.



FIG 6 –Test drive the tractor and adjust spring tension as needed. After the spring stretches out a bit, you may need to readjust tension again.