

GENERAL

The brace pin attaches the front of the reversing band brace to the reversing gear brake band. The brace itself has the important function of securing the reversing brake band fore and aft while the band is being tightened around the gear cage assembly to select reverse (as per Photo 1). The aft end of the brace is attached to the cross shaft.

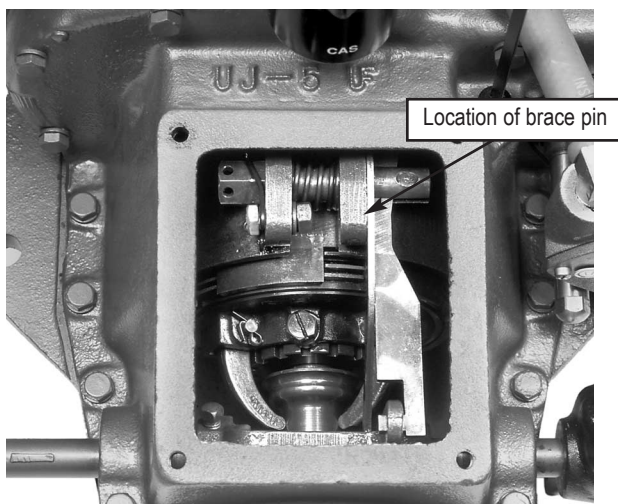


Photo 1

Original brace pins are quite short, and they occasionally become loose and work their way out of the brake band, moving through the hole in the brace, and then falling into the oil pan.

With the brace pin gone, the front of the brace becomes free, and it can no longer hold the brake band in place; making it impossible to engage reverse. ***In worst cases, a loose brake band can bind around the gear cage assembly and interfere with forward mode as well.***

The pin in this kit is long enough to extend through the ear of the brake band and to be secured by a cotter pin. The new pin is tapered unlike the original, which prevents it from sliding to the left.

INSTALLATION

If the break band is already out of the engine (during a rebuild for example), it is only necessary to tap the original pin out of the band (from left to right), and then to drive the new pin in (from right to left), until the cotter pin hole is exposed. Installing the cotter pin completes the job. It is usually easiest to orient the cotter pin vertically, (as per Photo 6).

If your break band is still installed (which is typical), continue with step 1.

1) Remove the retaining spring locking clip assembly including the 5/16" bolt and nut, (as per photo 2), being careful not to drop them in the oil pan.



Photo 2

If your factory brace pin has already fallen out, you can skip step 2.

2) Press out the original pin using a vise-grip (the standard 10" works well) and a 1-3/4" bolt (as per Photo 3). Be sure to hold the pin as it comes free so as not to drop it in the oil pan. A pair of needle nose vise-grips are ideal for this.

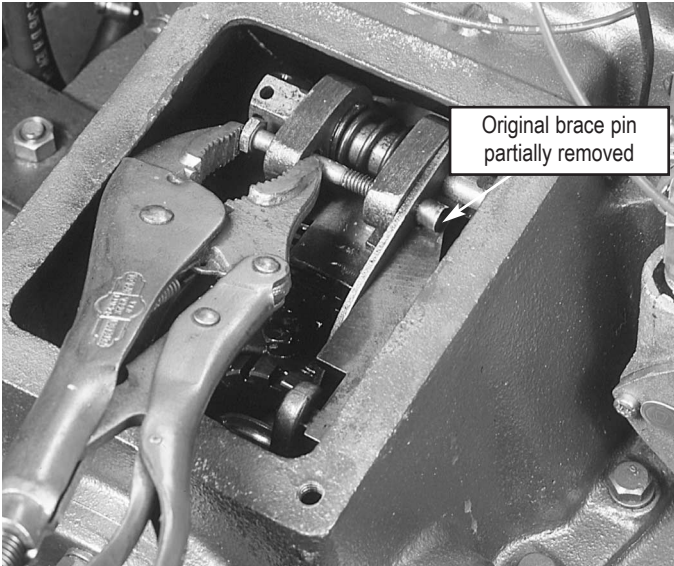


Photo 3

3) After the original pin is removed, press the new pin into place with the vise-grip (as per Photo 4). It is usually easiest to orient the cotter pin hole vertically.

Since the jaws of the vise grip will block the brace pin hole, we suggest using a small box end wrench as a spacer (3/8" or 7/16") (as per Photo 4). Gradually compress the brace pin into the box end wrench, removing the wrench as needed to check your progress. **NOTE:** Stop pressing the brace pin as soon as the cotter pin hole is fully visible, just enough for the cotter pin to be installed, (as per Photo 5).

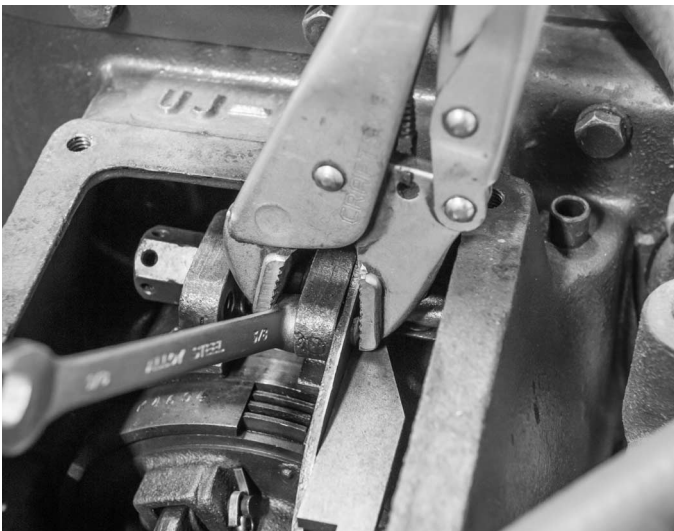


Photo 4

Finally, reinstall the retaining spring locking clip assembly including the 5/16" bolt and nut, that was removed in step 1.

NOTE: Original brace pins frequently did not extend quite through the entire thickness of the brace itself. The new pins are sized a bit longer and may extend slightly through the brace. This minor extension past the brace has no effect on the functioning of the assembly.

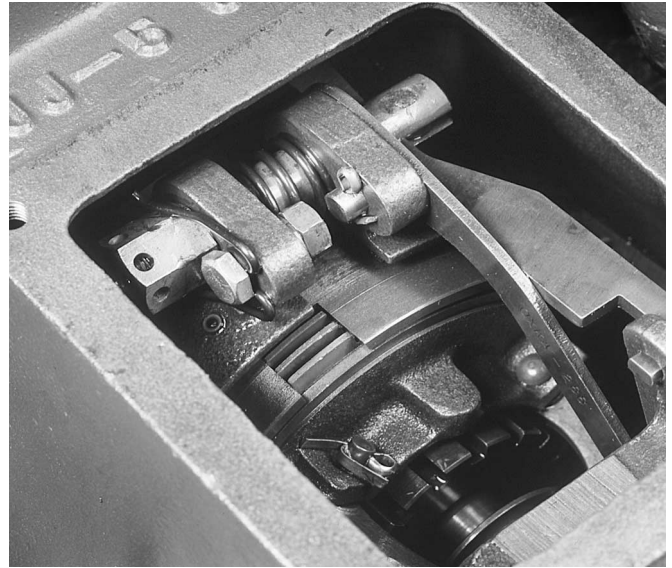


Photo 5

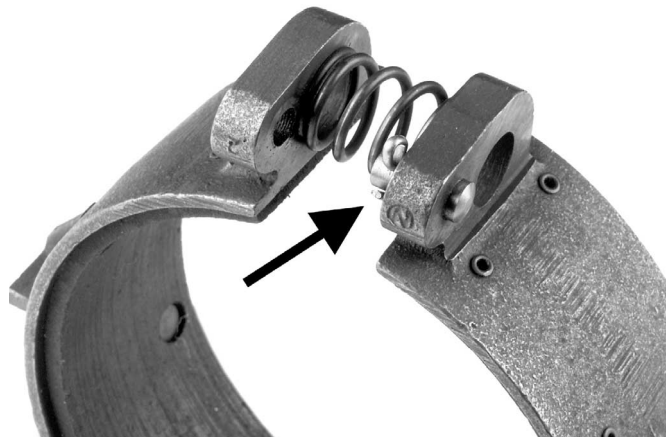


Photo 6



Reversing band brace

Brace pin with cotter pin