Stud replacement for 80 series front differentials

Contents of the stud kit

- 1 45mm class 10.9 stud
- 2 40mm class 10.9 studs
- 7 35mm class 10.9 studs
- 2 M8 class 10.9 DIN nut
- 11 M8 class 10.9 JIS serrated flange nuts

Note: This kit is for either available diff. If used on a nopen diff there will be 1 nut left over and if used on a locking diff there will be 1 stud left over.

Tools required

3/8" ratchet and extension

12mm socket

13mm 12pt deep socket

12mm box wrench

13mm box wrench

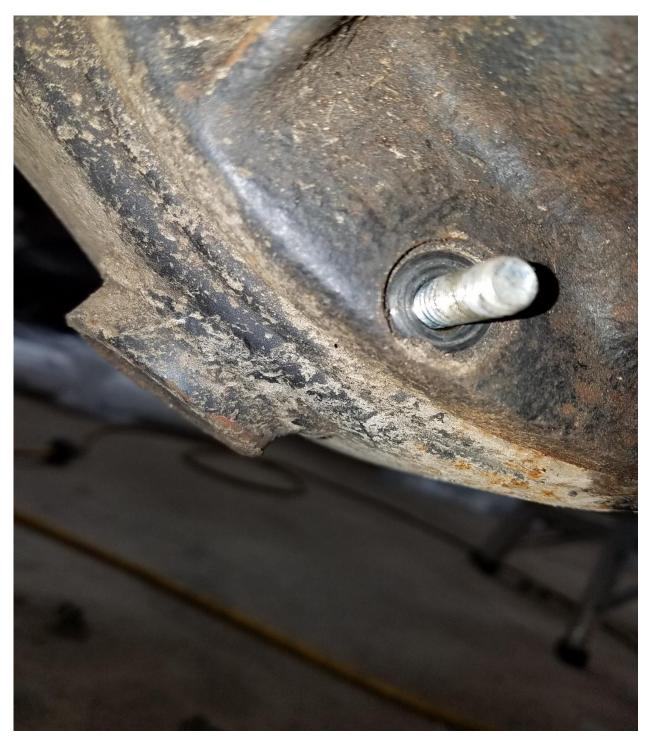
Overview: DIN refers to a German industrial standard where a M8 nut will have a head size of 13mm. JIS is a Japan industrial standard where the same M8 nut will have a head size of 12mm.

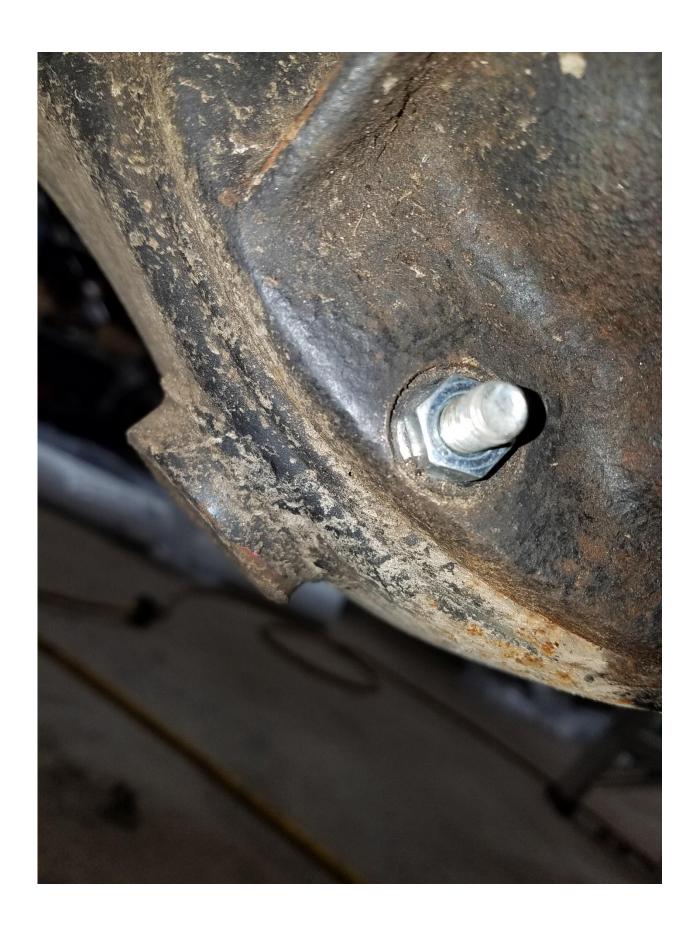
The idea is to take advantage of this difference to more easily jam 2 nuts onto the studs and extract them from the axle housing and well to install the new studs.

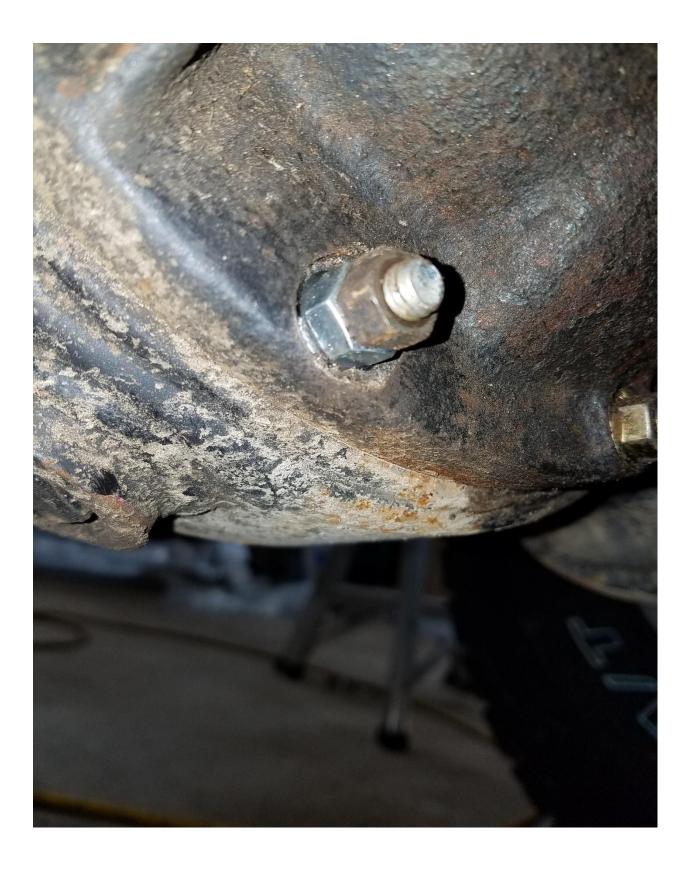
First step is to remove one of the existing nuts and it's washer from one of the studs. We then will use one of the supplied DIN nuts and run that nut down on the stud followed by one of the factory JIS nuts.

Now place the 13mm box wrench over both nuts and engage it with the inner DIN nut followed by placing the 12mm wrench over the factory nut and tighten the 2 nuts together locking then onto the stud.

The next few pictures shows the sequence of stacking the nuts. On the shorter studs the 2 nuts might be taller than the stud but should still work.







At this point we will use the 13mm 12pt deep socket to remove the stud. That socket will slide over the 12mm JIS nut and engage with the 13mm DIN nut and allow you to remove the stud.

Now using another 13mm DIN nut and factory JIS nut stack and jam the nuts onto the appropriate new stud for that position as shown below engaging only half the depth of the factory nut on the stud.

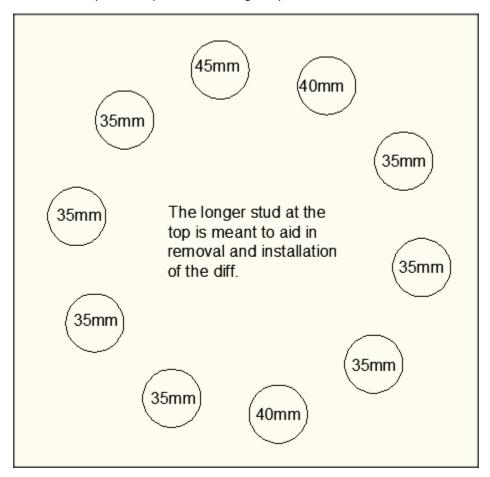


To install the new stud use the 12mm socket to engage with the factory nut and install the stud until the shoulder contacts the housing. At this point switch over to the 13mm deep socket and place it over the stud to engage with the 13mm DIN nut and further tighten the stud to release the DIN nut from the factory nut.

Now install the supplied serrated flange nut.

The bottom 4 studs are under oil and if you are doing this without draining the oil you will want to have the new stud setup for installation prior to removing one of those 4 studs so you can immediately install the new stud with minimum loss of oil.

Below is a map for an open diff showing the positions of where the different length studs go.



And below is a map for a locked diff showing the positions of where the different length studs go.

