

SR065

EXHAUST HEAD STUD REPAIR KIT

Never lose sleep again over a bent or broken exhaust stud on a 911 engine. This new tool is a must for every 911 mechanic and will pay for itself the first time you use it. This is a quick and totally accurate tool to repair and replace broken studs without damaging the head, or worse, having to remove the engine. The SR065 fixture indexes off of the exhaust port (by using one of the various sized port bushings included), secures to the opposite stud, and allows you to drill out, tap, and replace the stud—dead on, every time. Includes LH drill bits, tap with extension, drill jigs/guides, port bushings, and more. Fits ALL of the 911 heads including the 993.

Kit Includes:

SR065 Fixture	17/64" LH drill bit
PORT BUSHINGS	3/16" LH drill bit
30mm Port Busihing	8x1.25 tap
32mm Port Busihing	Tap Extension
33mm Port Busihing	17/64" drill jig/guide
34mm Port Busihing	3/16" drill jig/guide
35mm Port Busihing	8mm tap jig/guide
36mm Port Busihing	8mm bolt
38mm Port Busihing	8mm Jet Nut
39mm Port Busihing	Allen Key
41mm Port Busihing	Jig retaining screw
43mm Port Busihing	Padded storage box

The SR065 has been designed and manufactured so you may accurately remove and replace broken exhaust studs in your 911 heads with the engine in place while in the car. You can also use the tool, as shown in the pictures accompanying these instructions, on a head while it is out of the engine, or on a head that is part of a complete engine out of the car.

The following instructions assume that you have general mechanical ability and understanding, and that you follow ALL safety measures, including, but not limited to securing the car on a lift and or jack stands and that at all times you wear SAFETY GLASSES.

Instructions

After the exhaust has been removed and the broken stud isolated, (1) use a cut off tool or saw to square up the broken stud and to get it as flush to the head surface as possible. (2)



Figure 1



Figure 2

It is not necessary to have the stud completely flush, but it is desirable to have it flat and square to the head. (3)



Figure 3

Find the appropriate port bushing for the exhaust port of your head and using the supplied 8mm bolt, attach it to the bottom of the SR065 fixture. (4, 5)





Figure 4

Figure 5

The bushing you use must fit snugly into the port. Either because the port was modified, because of carbon build up, or because it is somehow deformed, the exhaust port size specified by the factory for your engine may not correspond exactly to the SR065 port bushings. If necessary, scrape/clean the port and/or coax the bushing with the fixture attached into the port. If you can't *gently* persuade a larger size bushing into the port, use the next size smaller and wrap a layer of tape around the bushing to take up slack, the whole time ensuring that the bushing is centered in the port. With the fixture in place, the jet nut and bushing retaining bolt just snug, align the fixture so the jig opening on the fixture is as centered as possible over the broken stud. (6/7)





Figure 6

Figure 7

Once centered, tightly torque the Jet nut and the bushing bolt. Insert the 3/16" jig/guide into the fixture as far as you can and lock in place with the retaining screw. (8)



Figure 8

Use the supplied LH 3/16" drill bit to carefully drill a pilot/guide hole into the broken stud. (9)



Figure 9

DO NOT DRILL TOO DEEPLY. At this point, even if you drill only half way into the stud, you are better off than over drilling and going through into the head. If you want, you can use a RH 3/16"drill bit instead of the supplied LH 3/16" bit. Occasionally you may be successful at this point to simply remove the fixture or the jig/guide and use an Easy-Out or bolt extractor (not supplied), to remove the broken stud. (11)



Figure 10



Figure 11

If the bolt is too stubborn, insert the 17/64" guide/jig into the SR065 Fixture and use the supplied LH 17/64" drill to clean out the stud. (12)



Figure 12

CAUTION- AT THIS POINT THE 17/64" DRILL BIT WILL CUT THROUGH THE STUD MUCH MORE QUICKLY THAN THE 3/16' BIT DID. PLAN ON DRILLING INTO THE HEAD NO FARTHER THAN THE STUD EXTENDED FROM IT.

After you have used the 17/64" drill, a mere shell of the stud will be left in the head- only the threads of the stud should remain. (13)



Figure 13

If everything has been centered properly, you can now use a dental pick and slowly unwind/extract the thread from the head. (14/15/16)



Figure 14 Figure 15 Figure 16

If you have successfully removed the threads as just described, congratulations, the hole and threads will be clean and you are set to install a new stud. (17)



Figure 17

If, however, remnants remain, "manually" chase the threads with the supplied 8x1.25 tap (18) or change the guide bushing to the 8mm red/aluminum jig, secure it in place, and use the supplied tap and extension to clean out the hole. (19)







Figure 19