Fitting a Kliktronic gear changer to a Royal Enfield

I am what can only be described as an unorthodox engineer, garden mechanic or back yard butcher; a motorcycle engineer I am not but needs must when the devil drives. I need the Kliktronic on this bike otherwise I can't ride it and the only way it's going on is if I do it myself with what I have in the shed or what comes via cosmic spares.

The first part of the job is to sit and think about what needs to be done and build it in my head, working out the problems as I go, this is an important stage as the best imaginary build with the least problems is the one that will get built. By doing this it became obvious that the best place to hang the Kliktronic is in the middle of the primary drive case, but on what? There's nothing there that will carry the weight (photo 1) so the only thing I can do is build a frame from the front engine plates to the rear engine plates and mount it on that.

Photo 1

So I now have an idea of what's required design wise but what the hell do I make it out of, this problem was bounced around for a while and a solution just wasn't forthcoming, time to walk away for a few hours. The following morning inspiration hit like a hammer, I have a pair of pannier frames and if I sacrifice one of them I can cut enough pieces with the correct bends to do what I needed.

A day later there was a few hours in the afternoon that might be dry enough to use the angle-grinder outside so I got stuck in to it, my first cuts were on the long side (if it's too long I can shorten it but if it's too short I'm buggered). With the cut bits now to hold up against the bike I could see that this part of the build would work and set about trimming everything to the correct size. A pair of slugs were found in a box of old bolts I've had for over twenty years, with these inserted inside the tube spanning both sides of the joins the frame sat just where it needed to be (photo 2).

Photo 2

At some point in an unorthodox engineering job like this the plans get changed and this is where I had to do just that, so it was time for a tea break and just as I had got my tea in my hand, it started to rain. The rain didn't last long and I was soon back outside thinking about the redesign, after an hour or so I'd got it sorted, I needed four inches of box section steel to be welded on the tube I'd constructed as a flat platform to bolt a piece of angle iron to with the Kliktronic bolted to that, only one problem, I haven't got any box steel, time to stop for the day.

One thing I always find useful is bouncing my ideas off friends as they can often see things I've missed so that evening I was chatting with an old friend over some beer about the build and mentioned I needed a few inches of box section and he said he may have some, the following evening it arrived, thanks Speed.

The day after, I cut the box section in half length wise and drilled it with the tube frame and bolted them together, next I cut a section of angle iron to length, slotted it on one side and drilled two holes on the other so it could be bolted to the half box section when it's welded in place. As the slot is where the Kliktronic will be mounted I then proceeded to take all of the sharp corners off with my bench grinder leaving a nice rounded shape.

The next day, next job was to have everything welded, as my welding skills are not good enough I asked my brother-in-law (Geoff) to do it for me, the end result is a strong weld I could never achieve. Once again rain stopped play for the rest of that day, annoying but something I have to put up with as I'm working in the open air. One job I could get on with is painting the frame I had made, a coat of paint was slapped on in my front room it's not pretty to look at but it'll stop it rusting and that's all that matters.

It seams that the weather pattern lately is dry in the morning and showers in the afternoon so to days job was to fit the newly painted frame and bolt the Kliktronic unit to it this was done and it's connected to the gear lever (photo 3), the switch gear is fitted too (photo 4) and the next bit is putting the control box somewhere dry. Guess what everywhere I look to put it there isn't enough space, not under the seat or in the side panels; I'm going to have to hang it on the side of the bike where the rain can get at it. I'm not keen on doing this as I don't know how water proof the connections are and as its Sunday I can't call Kliktronic and ask them so a quick call to Gary (NABD adaptions) to see if he knows. Gary isn't certain so he suggests putting it in a box and hanging that on the side of the bike, good idea, that's what I'll do.

Once again it's time for a rethink, the box for the control unit is just to big, after a fair bit of time I've decided to move the Scott Oilier and put the control box behind the left hand side panel, not an ideal place as its very close to the edge of the rear mud guard but it's the only space I can make available so it will have to do. Having fitted the control box the rest of the wiring is finished quickly and it's time to test the Kliktronic, guess what? The test has shown that the frame needs a brace to stop it flexing. A piece of angle iron is cut, shaped and drilled so it will fit on the bottom engine mounting bolt and bolt through the frame (photo 5), this works and it's now time for a test ride.

The test ride went well with the Kliktronic working as it should so all there is left to do is to slap some paint on the brace.

So there you have it, job done, another bike adapted.

My thanks go to the NABD, Speed, Geoff and Gary.

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Photo 3

Photo 4

Photo 5