## Indian 1942/45 Chief/Four 8" twin leading shoe brake conversion

Congratulations on buying a Australian product keeping our Industry going in these times where most things are coming from China or India

## Warning Warning Warning

Do not fit this brake assembly unless you are a component person or a motorcycle technician if in any doubt seek advice or go to a experienced person specialising in vintage motorcycles .These are brakes and if not fitted correctly may cause serious injury or even death. All existing fork components on your motorcycle need to be 100% top class condition and preferably not chrome( FORK LINKS, MAIN FORK GIRDER FRAME being the main culprits) to cause hydrogen embrittlement. Good bushes and pins as well are a absolute necessity in your leaf spring Indian these are required to be in excellent condition to cope with superior braking forces

This product is the heat treated alloy billet brake plate and machined from solid, this and the machined from solid cast-iron brake drum are both C.N.C machined for precise parameters and only top quality raw materials are used to ensure a good saleable product. Your brake has undergone severe rigorous testing in the proto-type stage on a military C344 Indian Chief with sidecar, maximum stress in Australia and passed with flying colours.

You may notice some components similar to 1968/70 Triumph Bonneville/or Trident and BSA A65 and R3, your right, these brakes were raced on the Isle of Man and ridden on road models on everything from a get to work or a Police bike with much success and stayed on Daytona models till 1974. I decided to not "Re-invent the wheel" as the saying goes and the advantage is you can buy some of replacement parts, shoes etc today across the world at any Vintage Triumph retailer.

Your standard Indian brake is 7" in diameter and the brake shoes lining area a full two thirds smaller, this combined with a primitive brake action SLS (single leading shoe) causes a mediocre, unsafe brake in today's traffic condition. Necessity is the mother of invention.

Indians were hand built and as such one thing that fits a identical model may not fit another, some situations will/may require" fettling" or adjusting to suit your machine the brake drum is fully assembled and will only need painting with the anchor arm to suit your machine colour.

## **Possible variations**

1 Full fenders/mudguards in this case the brake anchor bolted by 3 nuts on your brake plate may need reversing to line-up with your torque stay do this last and don't force the arm or stay, even if you need a small spacer or washer to suit. The brake plate MUST be dead flat otherwise scrapping noises will be heard and your brake will not operate at maximum efficiency.

Note: You must assemble as the original brake and fit your small "top-hat" spacer retrieved from your original brake assembly that fits between your wheel bearing and brake plate otherwise it will "lock-up" when the axle is tightened!

2 Check your fork ends need to be 8.3/8" inside the rocker arms on your rocker linkage as in the picture below 1940/45 condition but I have seen these brakes adapted into 1935-39 types



The TLS brake will require a bedding-in procedure for at least 100 miles and during this time will require brake shoe synchronising. This will require sometimes a third arm or a friend (friends maybe easier) you will notice your brake arms have a ¼" threaded rod with an adjustment it is retained by a clevis pin and a small split pin on both ends.

Remove the split pin on the front or lower arm and then the clevis pin, then with two 9/16 ring spanners on the arm nuts wind on tightly in a clockwise direction. Now with your third hand or friend loosen the small ¼ locknut and adjust the fork on the rod so the hole will exactly line up to enable the clevis to slide in with your fingers. Then lock your locknut fit the retaining split pin and adjust the handle bar lever to suit. Your brake will initially feel "spongy" but it will bed down and with each application will only get better and improve. As I said this will have to be synchronised two or three times.

## And don't over adjust the brake cable as this will overheat and cook your brake assembly ruining brake linings and wheel bearing be patient!