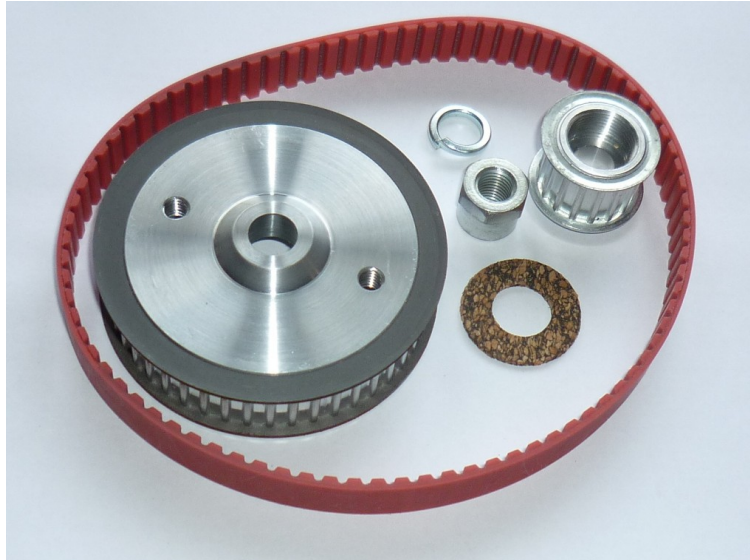


## **Dynamo Belt Drive Kit for BSA A7 & A10 pre-unit twins**

*Now DRL offer a practical long term solution to getting peak reliable performance from your charging system. Quiet, strong and non-slip. Precision engineered for long life and reliability. **This kit uniquely features a 15 mm wide durable belt and 20% increased gearing.***



### **Description of the kit**

Our superior quality kit employs a top grade 5 mm pitch toothed timing belt drive. Belt rated for continuous 100 °C operation and 15 mm wide for long life and lower maintenance. A ten year plus life-span is anticipated in normal use. The dynamo speed is 20% over the standard A10 drive ratio, so electrical loads are balanced at modest road speeds, especially significant at 12V. Unlike products using 'V' belts this drive is tolerant of oil and cannot slip: it could even run in oil. The small pulley has an internal thread and is readily extracted with a magneto puller. The large pulley has a pair of ¼ Whitworth holes for removal (use two of the case screws).

Apart from the speed increase the sometimes noisy, (witness how the majority of inner timing cases are damaged by wayward chains) tricky to adjust and messy chain running in grease is eliminated. It is perfectly safe to spin the robust Lucas E3L armature faster: it will not fly apart unless perhaps you are in the habit of sustaining 6,500 rpm through the gears, and you wouldn't do that to your BSA Pride & Joy (would you?). Indeed this belt drive increases the dynamo to crankshaft speed ratio to the same as a machine with a Lucas Magdyno.

Designed for zero maintenance and long life the teeth will not strip nor will the belt snap or stretch. Together with a DVR2 electronic regulator it completes the most complete modernizing makeover of your twin's charging system. Even if staying with 6 V charging a dynamo belt drive kit offers a low hassle, clean and silent long term solution.

Now you can run at 12V volts, with higher power halogen bulbs, daylight running lights (where preferred or required) and even with electronic ignition without fear of being stranded with a flat battery. Low maintenance overhead. Enjoy riding your BSA any time day or night. A true Fit and Forget solution.

*A top quality product, manufactured in the UK, and a competitive price*

## Fitting the dynamo belt drive kit

1. Remove the timing cover.
2. Loosen dynamo clamp bolt and rotate body. Remove the existing chain and sprockets or belt drive. (Use heat to loosen if necessary)
3. Clean all the old grease and grime from the inside and outside covers.
4. Inspect the tapers on the drive shaft and dynamo armature for imperfections. If necessary dress to a smooth finish to provide perfect mating with the new pulleys.
5. Soak the cork washer in oil and allow it to soften (overnight), then place it over the drive shaft and offer up the large pulley, fit spring washer and nut, tighten not too tight. (This cork is not essential but is included to replace the BSA fitted original.)
6. Place the small pulley on the dynamo shaft. Fit the spring washer and tighten the sleeve nut just a little at this stage, just so the pulleys sits squarely on the taper.
7. Slip the belt over the large pulley and rotate the dynamo to allow it to be passed over the small.
8. Rotate the dynamo body back to tighten the belt. Correct tension is such that it is easy to twist the belt at the middle of the lower run by about 45 degrees each way.
9. Check that the belt is positioned between the pulley flanges (not rubbing one side of one pulley and the opposite side of the second pulley). Lateral position can be adjusted by fitting a different thickness of annular cork seal between the dynamo and inner timing cover.
10. Complete the tightening of the small pulley sleeve nut. It does not have to be extremely tight for the taper to grip correctly.
11. Note that as you tighten the dynamo clamping nut the tension on the belt may increase, so check belt tension again after fully tightening the dynamo clamp. Also note that belt tension will increase in a hot engine so some slack when cold is important. Better to have the belt seem slack at this stage than it be on the tight side.
12. Re-fit the outer cover using the new gasket supplied.

