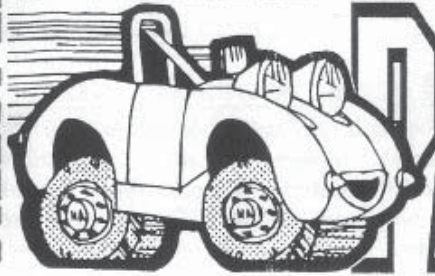


GILLSSPEED SPRITE & MIDGET PARTS



Greetings from Gillsspeed.

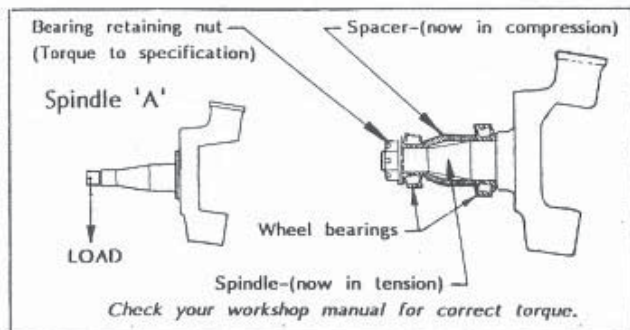
In response to reader suggestions, we now provide ring binder holes in all Gillsspeed Bulletins. The 'Easy Engine Mount Removal' tips were requested by a reader in Ararat (Vic). You are welcome to ask for any topics or information to be included in future bulletins. As you read this bulletin, please record your ideas and let us know by phone, FAX or mail.

Will Your Stub Axles Break?

In our last bulletin we promised to explain why fitting tapered roller front wheel bearings to your Sprite or Midget may be very dangerous. Since then, two Sprite owners have phoned to tell us they checked their tapered roller modified cars and found cracks in their stub axles. One owner snapped his cracked spindle off with a short length of pipe!

There is nothing wrong with tapered roller bearings, the problem is caused by people not understanding the 'English' stub axle design, which requires the wheel bearing retaining nut to be tightened to a specified torque. This pre-stresses the spindle and enables it to carry the suspension loads.

Many Sprites and Midgets are now driving around with 'loose' wheel bearing retaining nuts simply because of ignorance or because tapered roller bearings have been fitted and the wheel bearing spacer has been removed. The drawings below of Sprite style stub axles should make the following explanation of the 'English' design easy to follow.



If you apply ever increasing loads to the bare stub axle spindle 'A' shown above, it will eventually bend, crack or break. If your bearing retaining nuts are 'loose', the same thing may happen!

If on the other hand, you fit the standard factory wheel bearing set up, complete with the spacer, tab

washer and wheel bearing retaining nut, tightened to the recommended torque, you will have placed the spindle in 'tension' and the spacer in 'compression' as intended. This pre-loaded structure will now easily resist bending, because before any suspension load can bend the spindle, it will first have to compress the spacer or further stretch the spindle. Since the materials used in the spindle and spacer are stronger in 'tension' and 'compression' than in 'bending', the load which was able to previously bend spindle 'A' will now be too weak to bend the stronger pre-loaded structure.

Although tapered roller wheel bearings are usually cheaper than ball races, the extra time taken to correctly modify 'ball race' equipped cars to accept them is not worth the effort involved. Most wheel bearings last for ever, even in competition use, unless contaminated with dirt or water.

Propeller Shaft Installation.

In the last Gillsspeed Bulletin we also promised to tell you the easy way to fit the propeller shaft into your Sprite or Midget transmission tunnel and gearbox.

First, sit the back of your car on chassis stands and let the rear suspension hang down. Second, tightly stuff four balls of newspaper into the front universal joint to make it rigid. Third, feed the propeller shaft in between the fuel tank and the drivers side rear spring and then over the top of the back axle housing assembly into the transmission tunnel. Now that the front universal joint has been made rigid with the four newspaper balls, you will find it quite easy to 'spear' the shaft into the transmission. The newspaper balls will fall out themselves. Do not 'tape-up' the joint because the tape unwinds making a fearsome noise.

Another time saving tip.

When removing the gearbox from a Sprite or Midget, leave the propeller shaft bolted to the differential. The propeller shaft slips out of the gearbox on removal and is easy to guide back into the gearbox if you put your hand into the gearstick hole in the transmission tunnel.

Easy Engine Mount Removal.

Use the following procedure when removing your Sprite or Midget engine mounts. Support the engine with your lifting gear. On the passenger side, remove the metal bracket from your car but leave the rubber mount on the engine. On the drivers side, remove the two nuts securing the rubber mount to the front engine plate and leave the rubber mount and metal bracket bolted to the chassis. Your engine will now lift out cleanly. When refitting the engine, lower it onto the drivers side mount first and loosely refit the two nuts, then lift the engine slightly to refit the

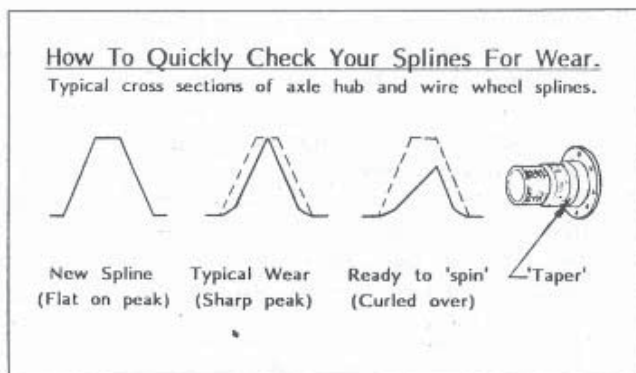
What's That Noise ?

If your car has wire wheels and you hear a 'clonking' sound when you brake or accelerate, it's time to take a close look at your wire wheel splines.

New wheel and hub splines are machined with a definite 'flat' on the top of each spline. Worn splines are much thinner with a 'sharp ridge' on the top.

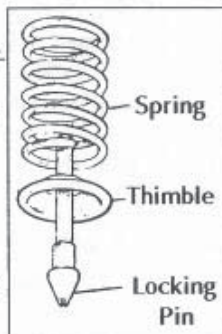
The 'taper' on the wheels and hubs are also prone to wear. Worn front wheel tapers allow the wheel hub to rub on the disc brake caliper. Worn rear tapers allow the wheel to contact the four 3/8 UNF nuts that secure the rear brake drum. When these four nuts work loose, the rear axle flange starts to wear through the four studs that hold the rear hub, axle and brake drum together. All these faults require urgent attention!

Gillspeed stocks new and used painted and chrome wire wheels, spinners and c/o reconditioned splined hubs for all Sprite and Midget models. Gillspeed can press your rear hubs off and on your axle shafts if required, thus allowing you to change your hubs at home. We can arrange to economically freight your axles and hubs to and from Gillspeed from any part of Australia.



Check Your 'Thimble'.

If your bonnet is hard to shut, or sometimes pops open, it is almost certain to be a broken 'thimble'. For less than \$10, you can save the expense of a new bonnet, scuttle and windscreen when your bonnet safety catch fails to stop your bonnet flying open!



Ordering parts from Gillspeed is easy:

Phone your order through today on (03) 568 0688, or FAX it to Gillspeed on (03) 568 0043, or mail it to..... You can use Bankcard, Mastercard, VISA, by phone or FAX, or mail a cheque or use C.O.D. Mail.

New Looms Available Now.

When you need a new wiring loom for your Austin Healey Sprite or MG Midget restoration, call Gillspeed. We hold all model variations in stock. When you order your loom, we will point out the safe way to protect it from 'shorts' when you first hook up the battery.

The Secrets of a Good Clutch.

The flow chart in the Gillspeed Sprite / Midget catalogue explains how to diagnose your clutch problems at home. Repairs are straight forward and replacement parts are available from Gillspeed.

The following small parts are really not up to the job and need to be routinely replaced to make your clutch repair job a complete and lasting success. The crankshaft spigot bush (on 1275 motors in particular) often silently disintegrates allowing the first motion shaft in your gearbox to rotate 'off centre'. If it runs like this for too long, it is not uncommon to collapse the needle roller bearing and wear the bearing surface off the front of your mainshaft, break teeth or wear the 'dogs' off your first motion shaft, and wear out your third and fourth gear synchronizer hub!

Two other items that need routine replacement are the clutch release lever bush and bolt. When worn, they allow the clutch release lever and clutch release bearing to also run 'off centre'. This usually leads to the sudden disintegrating of the carbon filled clutch release bearing which then destroys the 'thrust button' on the pressure plate and sometimes even tears the clutch release lever pivot off the gearbox front cover.

Bugeye Demand And Prices Soar.

Two Bugeye Sprites were sold in Victoria during June for just over \$12,000 each! Demand for Bugeyes is very strong at present, greater than it has been for years. It seems everyone wants one!

If you are thinking of selling your car for top price, you now have less than six months to get it ready for the summer selling season. If you plan to keep it, you have even less time to repair it before those sunny spring days return and tempt you to tear the roof off and go for a blast. Meanwhile, you may need spare parts, repairs, workshop manuals, restoration guides, or assistance to get your car ready for action. If you do call Bob Gill or Derek Bayliss today to arrange overnight delivery to your door.

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