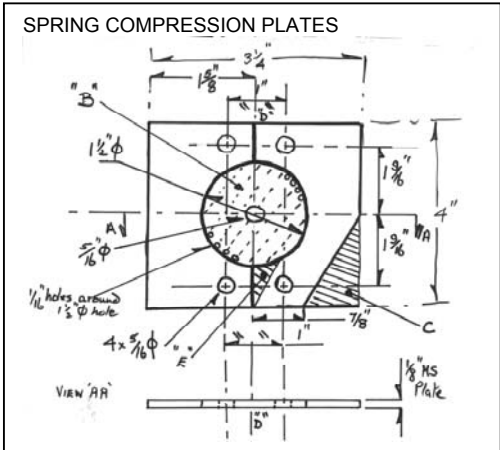


**Morgan Plus 8 Front Suspension Spring Restraint ~ John Wroe**

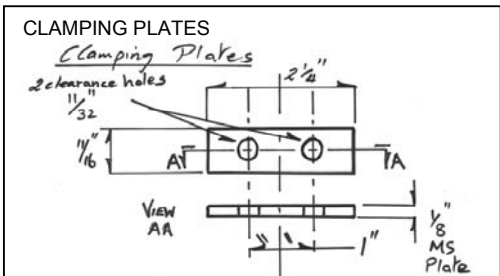
As an adjunct to Vern Dale-Johnson's March 2008 EAR article "Long Distance Touring" and the enclosure "Rebuild Your Own Front Suspension" by Fred Sisson 1997, referred to as "THE INSTRUCTIONS", I have found the following additional tools useful to retain the road spring compressed and to guide the King pin during re-assembly.



**SPRING COMPRESSION PLATES**

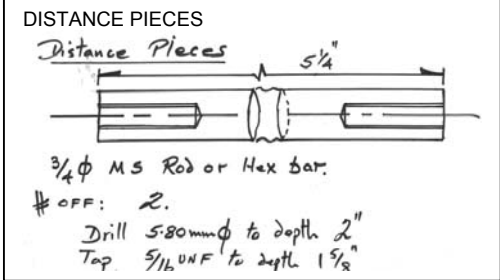
- No Off: 2 Mild steel
- 1. Cut & file 2 plates 3 1/4 " x 4 "
- 2. Clamp together & drill 5 x 5/16" dia holes. Bolt plates together
- 3. Centre "pop" around 1 1/2 " hole & drill series of 1/16 " holes
- 4. Remove metal "B" & file hole to size
- 5. Remove metal "C" from both plates
- 6. Hacksaw plates in half along "DD"
- 7. Hacksaw off pieces "E" from both plates

Note! It may prove necessary to increase the size of cut pieces "C" & "E" to ensure plates fit between spring & King Pin mounts



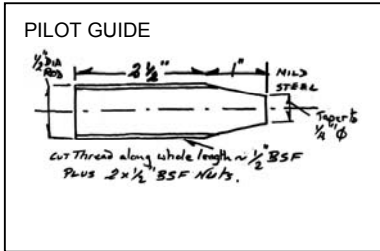
**CLAMPING PLATES**

- No. reqd,
- Either 8-off x 1/8" MS plate
- OR 4 off x 1/8" plate AND 2 off x 1/4" plate



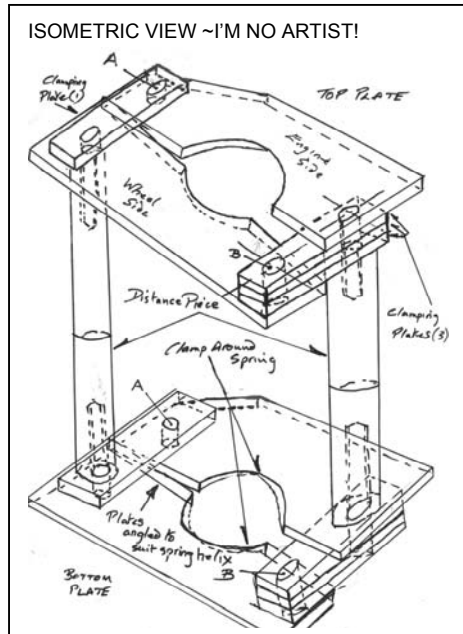
**MISCELLANEOUS ITEMS**

- 4 x 1 1/2 " 5/16 UNF Allen cap head set screws & Nuts
- 4 x 1 1/4 " 5/16" UNF Allen Cap head set screws
- Allen key to suit



## PROCEDURES

The following procedures dovetail in with **"THE INSTRUCTIONS"** and the use of the **"disassembly / assembly" tool** or something similar.



1. With the car on axle stands at front remove a front wheel.
2. Remove the front damper & disconnect the brake caliper and suspend it away from the suspension assembly
3. Carefully jack the hub/disk to compress the suspension spring until bottom tube is just released from the axle stand.
4. Slide the **TOP PLATE** (Engine side with cutaway "C") behind highest possible spring coil engaging plate into coil
5. Ditto slide **TOP PLATE** (Wheel side) into same spring coil.

**NOTE!** Plates will be at different angles to match the spring helix angle

6. Join the two plates as shown with a 1/8" thick **Clamping Plate** & loosely bolt together @ "A" with a 1/4" Allen screw
7. Ditto other side using 3 thicknesses of **Clamping Plates** bolting together @ "B"
8. Repeat 3, 4, 5 & 6 at the bottom of the spring
9. Carefully insert the 2 **Distance Pieces** and bolt together top & bottom with 1 1/2" Allen cap head screws
10. Gradually tighten all 8 screws/bolts aligning the fixture fore & aft. Carefully lower the Jack from the Disk/hub and the Fixture will restrain the spring in a compressed state
11. Continue to remove the King Pin following **THE INSTRUCTIONS**. The suspension spring will remain compressed and enable easier re-assembly

## RE-ASSEMBLY

12. Screw into the King Pin the **Pilot Guide** with the tapered end uppermost
13. Insert the King Pin & rebound spring through the bottom chassis lug. Fit the hub to the King Pin and then the compressed spring and dust shield.
14. It should be possible to now guide the King Pin into the Top chassis lug using the **Pilot Guide** to locate through the upper chassis lug.
15. Re-attach the disassembly / assembly" tool described in **THE INSTRUCTIONS** and commence "jacking" the King Pin back into place
16. Once there is sufficient thread of the **PILOT GUIDE** showing above the Top Chassis Lug use a 1/2" BSF nut to "wind" the King Pin into place in the Top Chassis Lug.
17. Finally finish using the disassembly / assembly" tool to mate the bottom faces and refit the Nuts and bolts and the bottom chassis brace. Remove the **PILOT GUIDE** replacing it with the standard top King Pin 1/2" BSF Bolt
18. Continue to reassemble as per **THE INSTRUCTIONS**

The above method obviates the need to use mirrors to "try" and centre the King Pin to enable installation of the top King Pin bolt and generally makes the job easier ~ IN MY OPINION!