

MR GRUMPY'S MORRIS MINOR

These instructions have been compiled for your safety and to make it easier for you to assemble this kit, but are not intended to cover all possible situations that may occur. It must be clearly understood that common sense, caution and care are factors that cannot be built into any product.

Please read these instructions and understand them before starting the job as assembly problems can often be avoided this way. If you are unsure on any point, or not confident in your abilities, then

Before Starting Work:

Jack up the front of the car and support it securely on axle stands placed under the chassis. Do not use a jack alone to support the car whilst working, even when you are not actually underneath it.

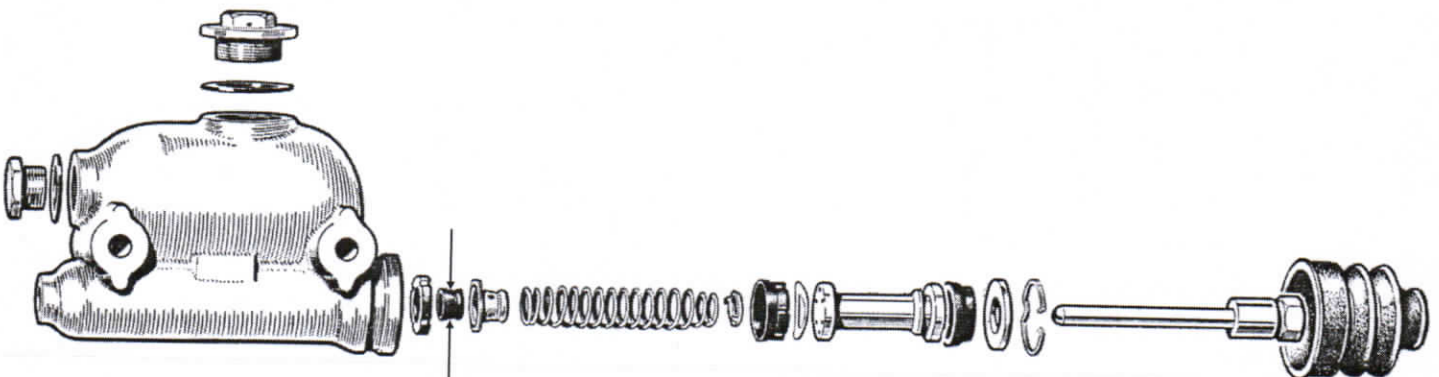
Please refer to any Morris Minor workshop manual for guidance on removing the existing braking system.

You will need to drill out the four $\frac{5}{16}$ " holes in each king-pin (the ones used to hold the backplates on) to $\frac{3}{8}$ " for the new caliper bracket bolts. Use a slow speed drill and a sharp bit as the material may work harden if too high a speed is used. Take care when drilling as there is only a small amount of metal to be removed and the bit may "grab" as it passes through.

Ensure that the split-pin holes in the stub axle are clear and that the new pins will pass through ok. If not, open out the hole gently using an $\frac{1}{8}$ " drill bit.

Included in the kit are two replacement hub nuts, check these will go onto the stub axle thread easily. These half-nuts are left and right handed and the pressed steel retainer takes the place of the castellations on the original nut.

Master Cylinder Modification:

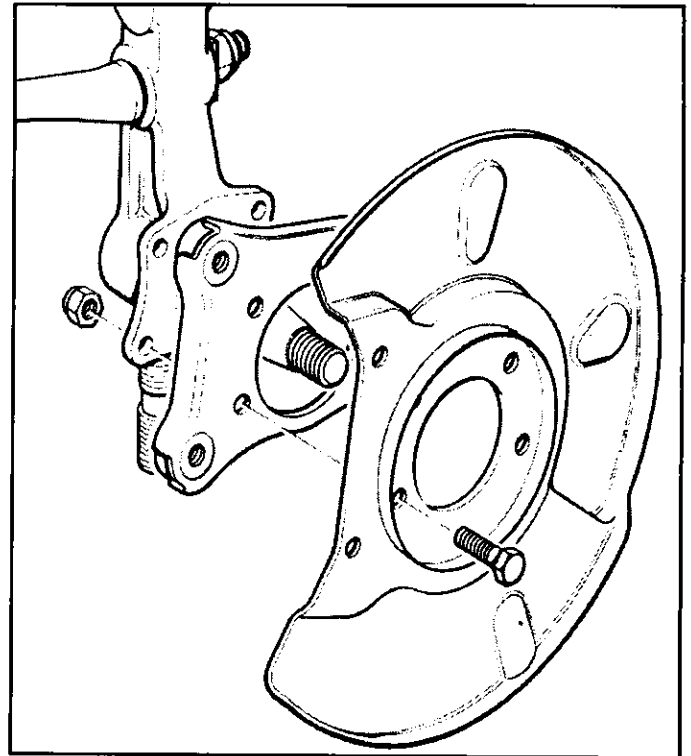


Note: Remove the valve rubber only from this check valve. Leave the metal body in place

Dismantling:

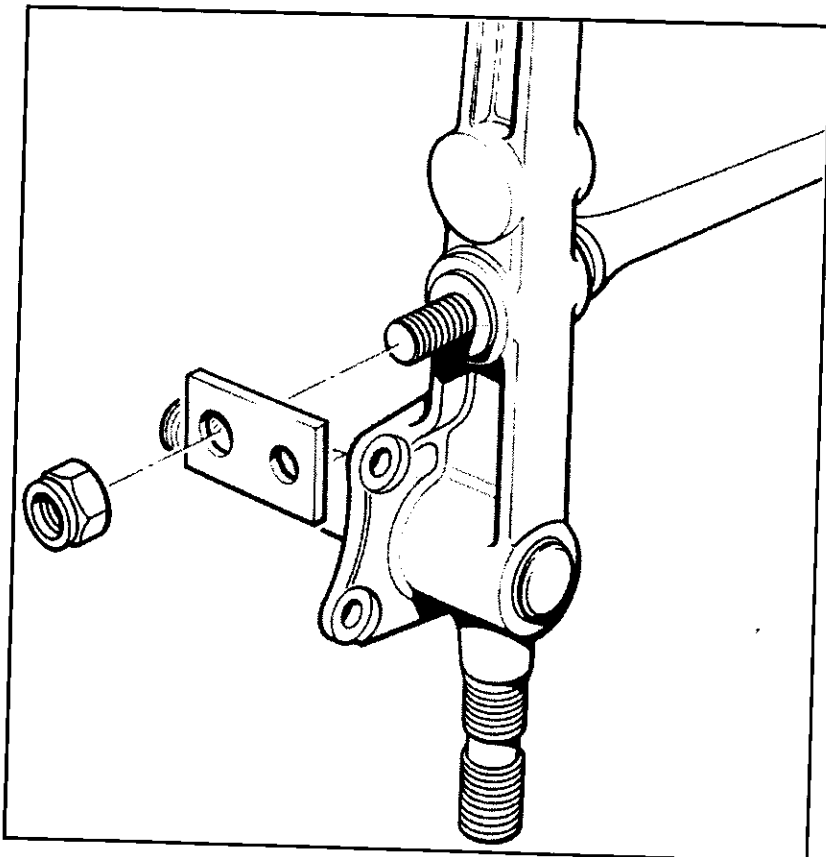
Before commencing work please make sure that all normal safety precautions have been observed.

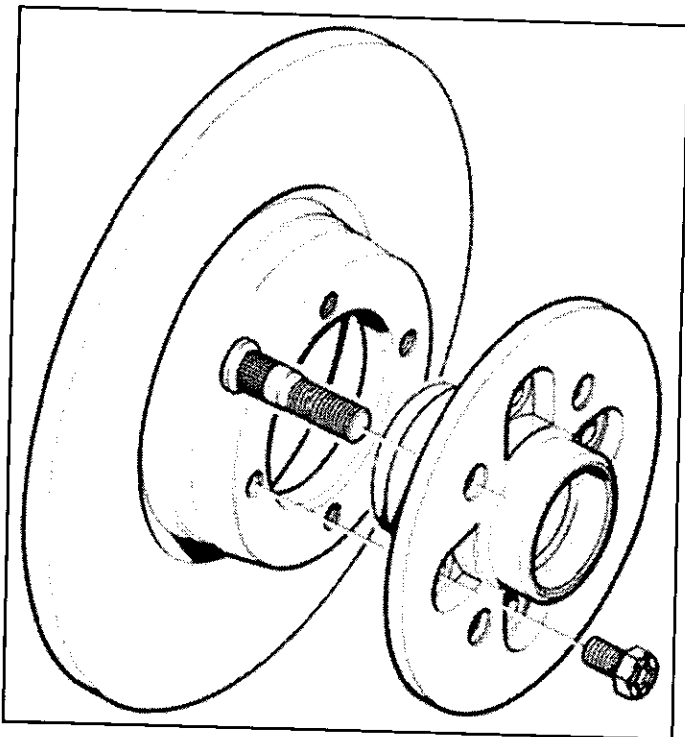
- 1) Remove hub cap and road wheel.
- 2) Prise off grease retaining cap.
- 3) Remove the two cross-head screws securing the brake drum to hub.
- 4) Remove brake drum.
- 5) Remove split pin from the stub axle nut.
- 6) Remove stub axle nut remembering that the left hand stub axle has a left hand thread.
- 7) Remove hub. Occasionally the inner bearing and spacer remain on the stub axle which may require removal using an extractor.
- 8) Remove the brake bridge pipe connecting the two wheel cylinders.
- 9) Remove the flexible brake hose from it's union at the inner wing.



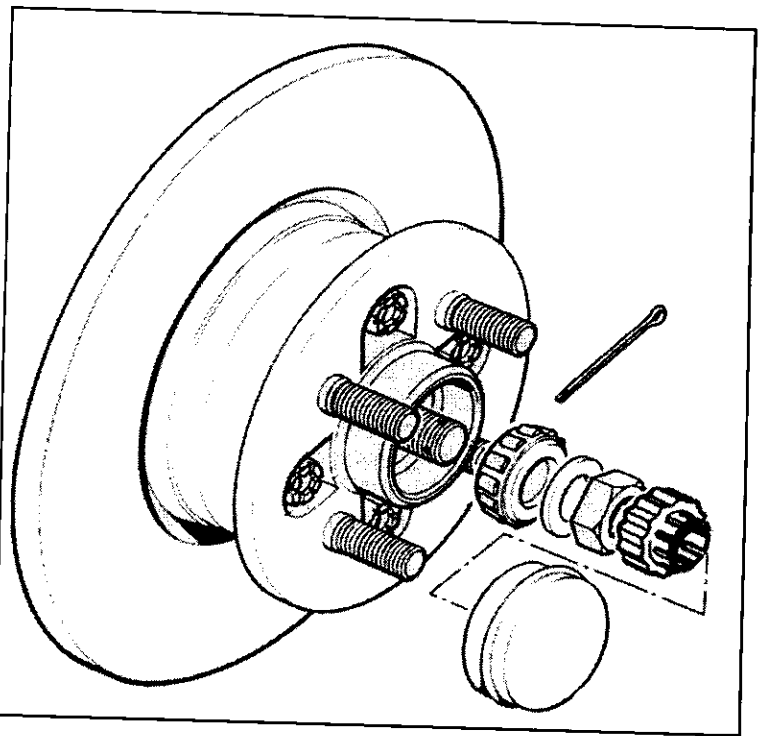
Assembly:

- 1) To avoid confusion all parts should only be removed from packets immediately prior to fitting.
- 2) Remove nut (not washer) from end of steering arm and fit bracket over threaded part of steering arm. The bracket should protrude towards the engine compartment. Replace steering arm nut and tighten to 70 to 80 lbf ft.
- 3) Offer up caliper bracket to king-pin. The recessed part of the bracket should face towards the king-pin and the calliper fixings towards the rear of the vehicle.
- 4) (Drill out holes in king-pin to 3/8")
- 5) Offer up dust shield to caliper bracket and bolt through caliper bracket to king-pin ensuring the





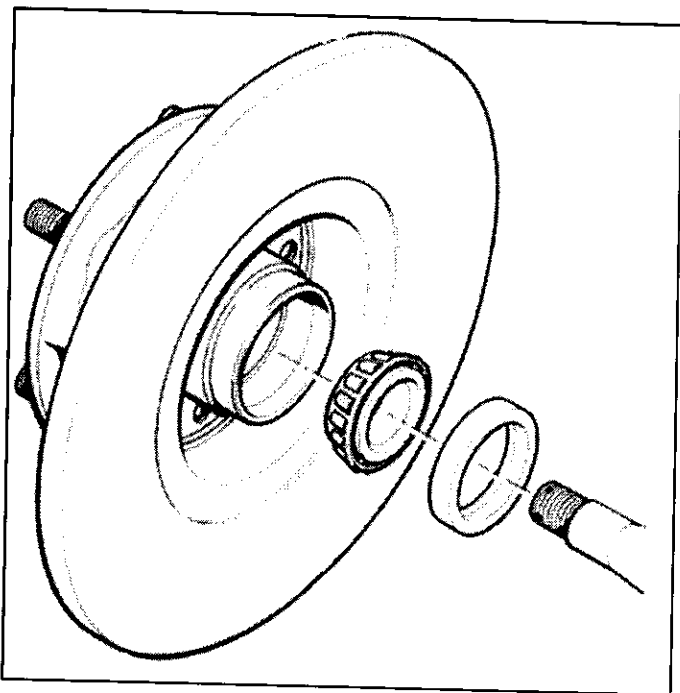
- 6) Insert the four wheel nut studs into hub and gently tap until fully seated.
- 7) Push the hub through centre hole of disc



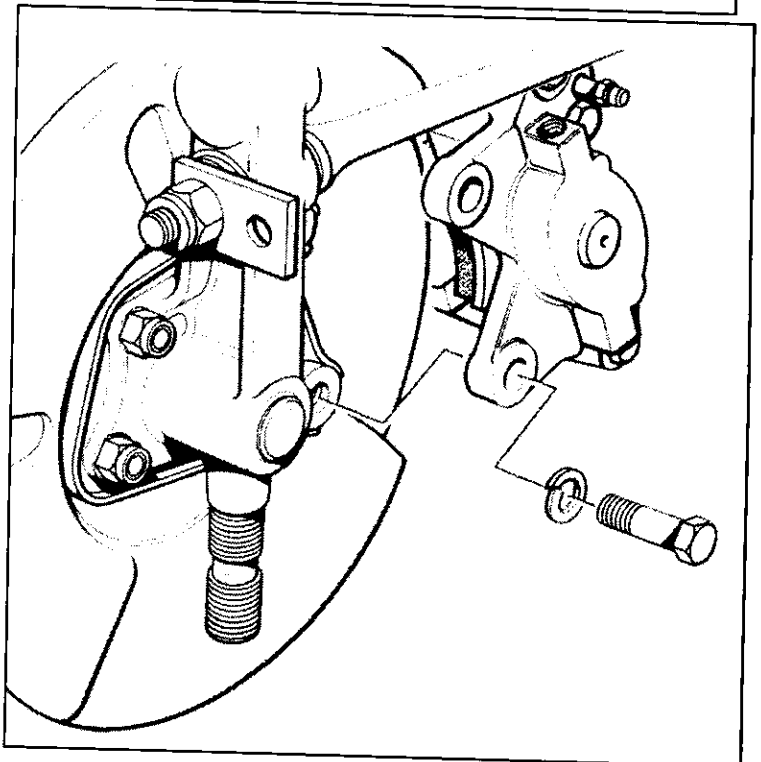
With the hub nut backed off, spin the hub and tighten the nut to 5 lbf ft whilst it is still turning. Repeat this a few times to allow the bearings to bed in and then leave the nut finger tight.

Position the pressed steel split-pin retainer over the nut so that half a split-pin hole in the shaft is covered by one of the arms of the retainer and so when you loosen the nut all of the hole is exposed. Do this and insert the split-pin and finally lock it by bending around the retainer.

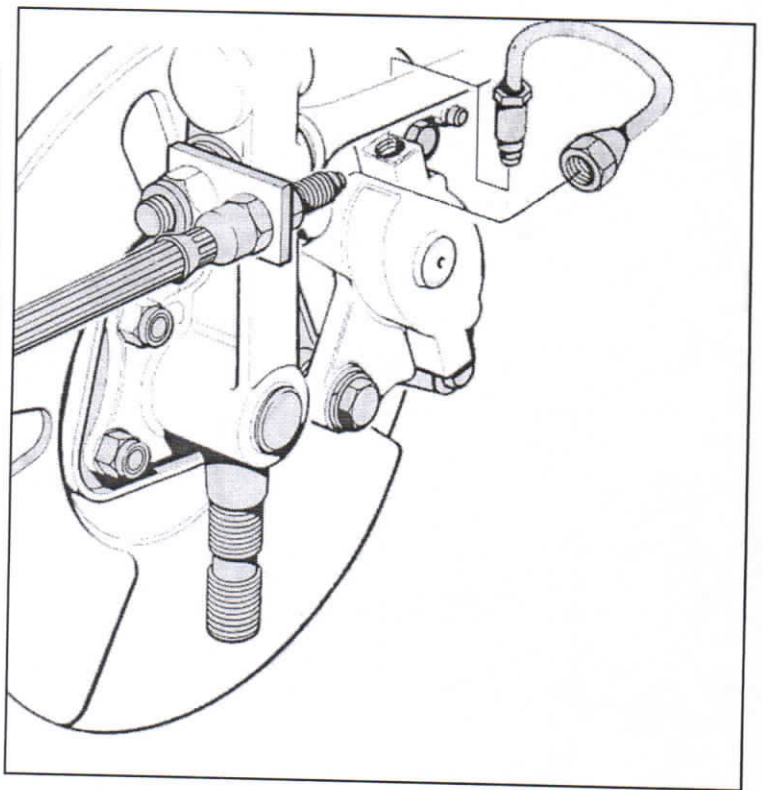
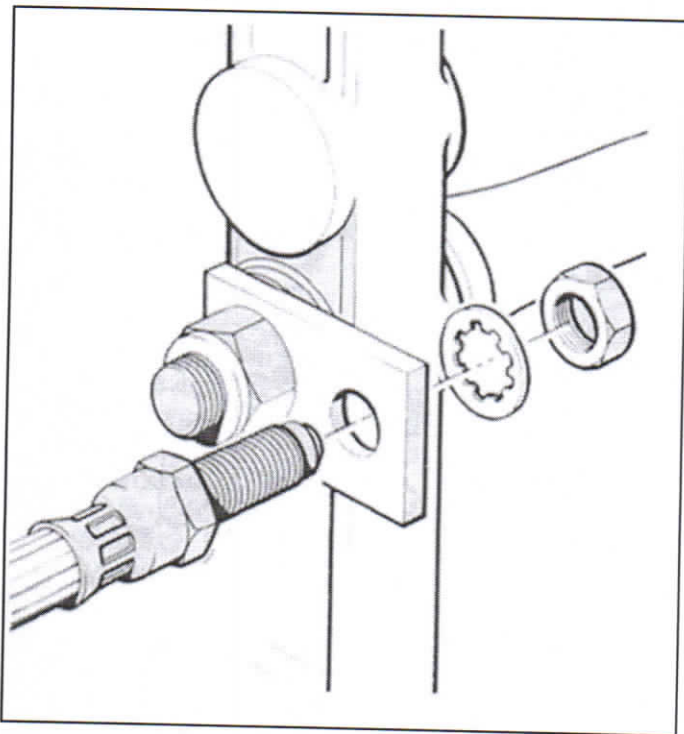
A small amount of rock (max 1/4") will be noticeable when the



- 8) Fit inner bearing cone and seal into hub.
- 9) Pack hub with grease.
- 10) Slide hub and disc assembly over stub axle.
- 11) Check that outer bearing cone is correctly seating into cup and fit the large thrust washer, the pressed steel retainer & the hub nut. (NOTE: L/H NUT IS GOLD



- 12) Fix caliper to mounting bracket and tighten bolts to 50 lbf ft.



- 14) Pass male end of flexible brake hose through bracket on steering arm, fit washer & nut.
- 15) Remove plastic plug from caliper and screw in new copper bridge pipe.
- 16) Gently bend bridge pipe and align with flexible hose (see diagram). Tighten nut on bridge pipe ensuring correct alignment to avoid cross threading.
- 17) Replace wheel and hub cap.

Kit Contents:

Qty.	Part No.	Description	Qty.	Part No.	Description
			1	GMP005	Dustshield - R/H
			1	GMP006	Dustshield - L/H
1	GMP001	Brake Caliper RH	1	GMP007	Caliper Bracket - R/H
1	GMP002	Brake Caliper L/H	1	GMP008	Caliper Bracket - L/H
1	DSK101	Brake Pads - Set 4	2	DSK107	Copper Brake Pipe
1	DSK101A	Brake Pad Fitting Kit - Both Calipers	2	CBS122A	Flexible Brake Hose
1	DSK101B	Brake Pad Shim Kit - Both Calipers			
2	DSK104	Front Hub (NEW) With Bearings & Seal			
2	DSK150	Brake Disc (MARINA / MINOR)			
			4	GMP009	7/16" UNF Bolt - Caliper > Bracket

MR GRUMPY'S MORRIS MINOR