

# Fitting Instructions

## MGB Front Bilstein Telescopic Damper Conversion Kit

**Part No:** TMK30701  
**Application:** MGB, BGT & V8  
Suitable for standard ride height cars only.

### Kit Contents List

<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
GHF106	BOLT, 3/8" UNF X 1.5"	4
BH607201	BOLT, 7/16" UNF X 2.5"	2
53K1025	BOLT, turret to crossmember	8
TMG3609	BRACKET, brake pipe extension	2
8G612SPK4	BUSH, top trunnion, polyurethane	4
BHH1123SPK	BUSH, lower wishbone, inner, polyurethane	4
TMG3605	CROSS BRACE, turret assembly	2
TMG3608	DAMPER MOUNTING, lower/spring pan	2
TMG3601	DAMPER UNIT, Bilstein, front	2
1G4349	FULCRUM PIN, top trunnion	2
TMG3612	NUT, BINX, thin, 3/8" UNF	6
NL607041	NUT, castellated, 7/16" UNF	2
NL608041	NUT, castellated, 1/2" UNF	4
GHF272	NUT, thin, 5/16" UNF	4
GHF274	NUT, thin, 7/16" UNF	2
TMG3606	PIVOT BAR, turret assembly	2
SH606061	SET SCREW, 3/8" UNF X 3/4"	6
SH605061	SET SCREW, 5/16" UNF X 3/4"	4
GHF503	SPLIT PIN, 7/64" X 1.5"	6
TMG3607	TURRET ASSEMBLY, damper mounting	2
TMG3610	WASHER, inner pivot	4
AAA1330	WASHER, lower inner bush	4
GHF302	WASHER, plain, 3/8" X 3/4"	2
GHF301	WASHER, plain, 5/16" X 5/8"	4
GHF303	WASHER, plain, 7/16" X 7/8"	2
GHF333	WASHER, spring, 3/8"	12
GHF334	WASHER, spring, 7/16"	2
TMG3603	WISHBONE ARM, front, scalloped	2
TMG3604	WISHBONE ARM, rear, scalloped	2



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### Installation Instructions

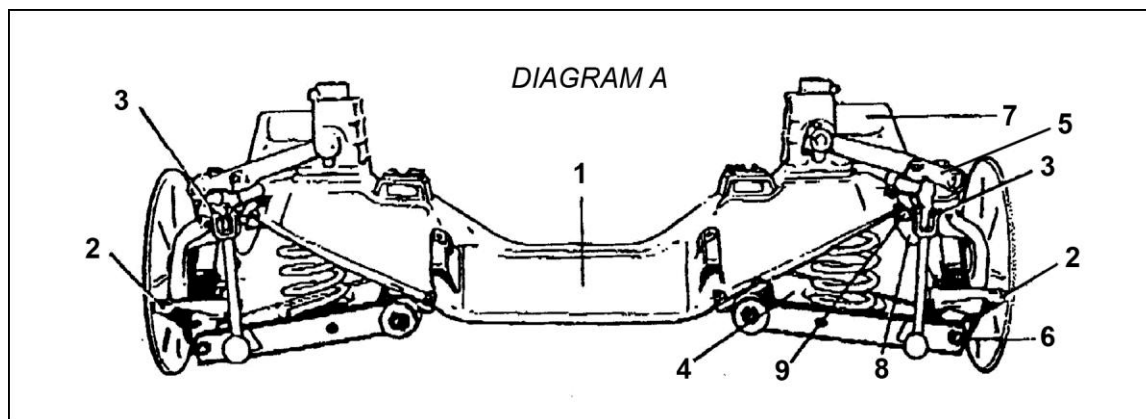
Before commencing, please read and ensure you understand the instructions, and check that:

- a) The kit is complete, as per the contents list
- b) All components being re-used are in good condition

### Safety Precaution

1. Chock the rear wheels to stop movement. (Wheel chocks Part No: DMR54500)
2. Jack up the car and support the bodyshell on the chassis rails. Use suitable axle stands and ensure the car is safe before working underneath. (Original side jack Part No: BHA5329. Trolley Jack Part No: CTR081. Axle stands Part No: CTR078).

### Removal of Original Components



Although the following instructions do not involve removal of the front suspension crossmember assembly, they nevertheless apply should you prefer this method.

For the following steps refer to: DIAGRAM A

1. Jack up the front of the car, safely support on at least two points on the chassis and remove the road wheels.
2. Disconnect the flexible brake hoses from the front crossmember assembly (1). If removing the crossmember from the car remember to disconnect the brake pipe to the chassis.
3. Disconnect the track rod ends from the steering arms (2) and the anti-roll bar links (3), if fitted, from the lower wishbone/spring pans (4).

Note: To easily split the track rod end from the steering arm use a ball joint separator (Moss Part No: DMR13914).



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4. Remove the coil springs and detach the spring pans from the wishbone arms (4).

NOTE: Take care when removing the springs, the safest method is to use coil spring compressors (Moss Part No: DMR14173).

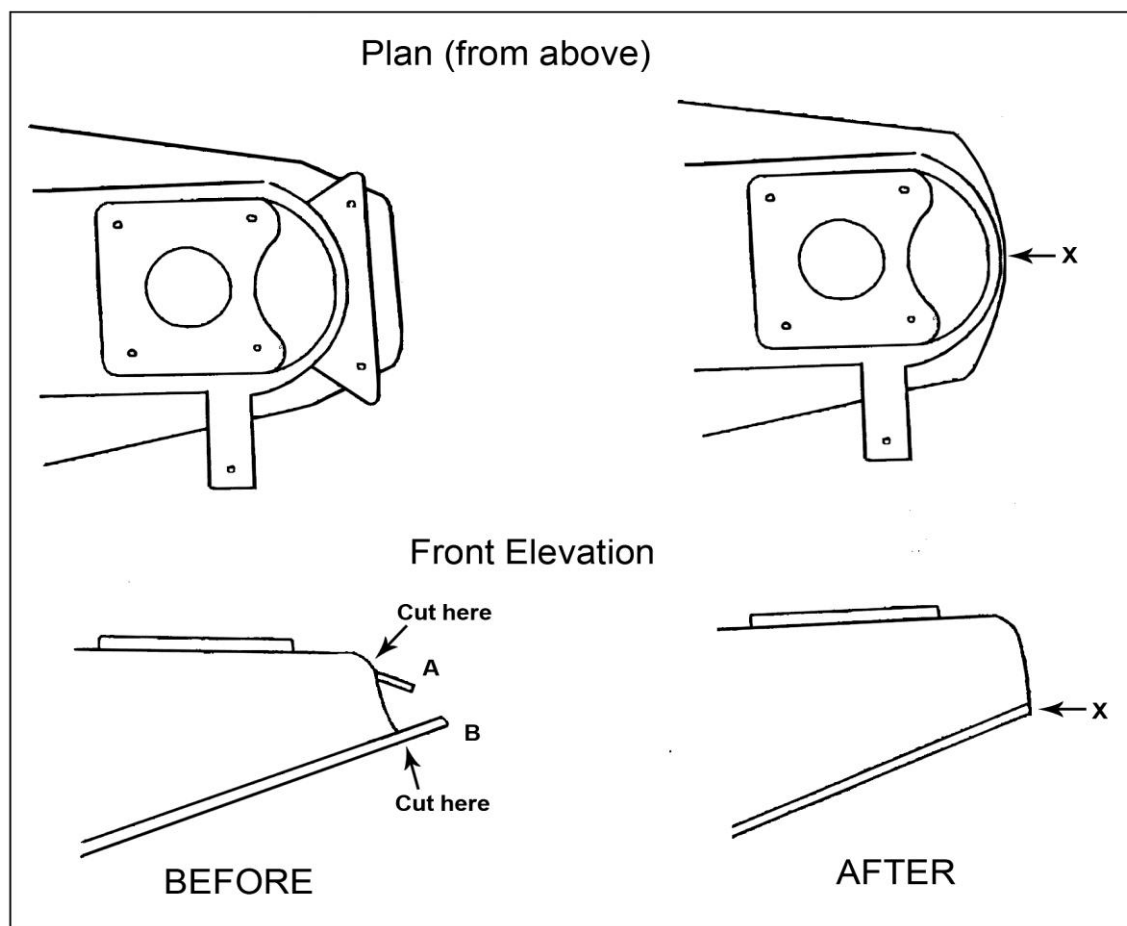
5. Remove the upper trunnion pins (5) and lower link bolts (6), and withdraw the stub axle and hub assembly from the car.

6. Remove the two lever arm shock absorbers (7) from the front cross-member.

7. Remove the bump stops (8) and their spacers (9) from the outer ends of the front crossmember.

### Modifications to Crossmember

DIAGRAM B



For the following steps refer to DIAGRAM B

8. Cut off the bump stop brackets (A) & (B) from the front crossmember and dress back the edge neatly.



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9. Using a lump hammer, carefully knock in the resultant ends of the front crossmember, at point X by approx. 1/2" (13mm) to give clearance for the telescopic shock absorber. Paint as necessary.

### Assembly of Conversion Kit

For the following steps refer to: DIAGRAM C

10. Attach the upper wishbone pivots (1) to the turrets (2) using the 3/8" UNF x1.5" bolts and spring washers. Tighten to a torque of 42lb.ft.

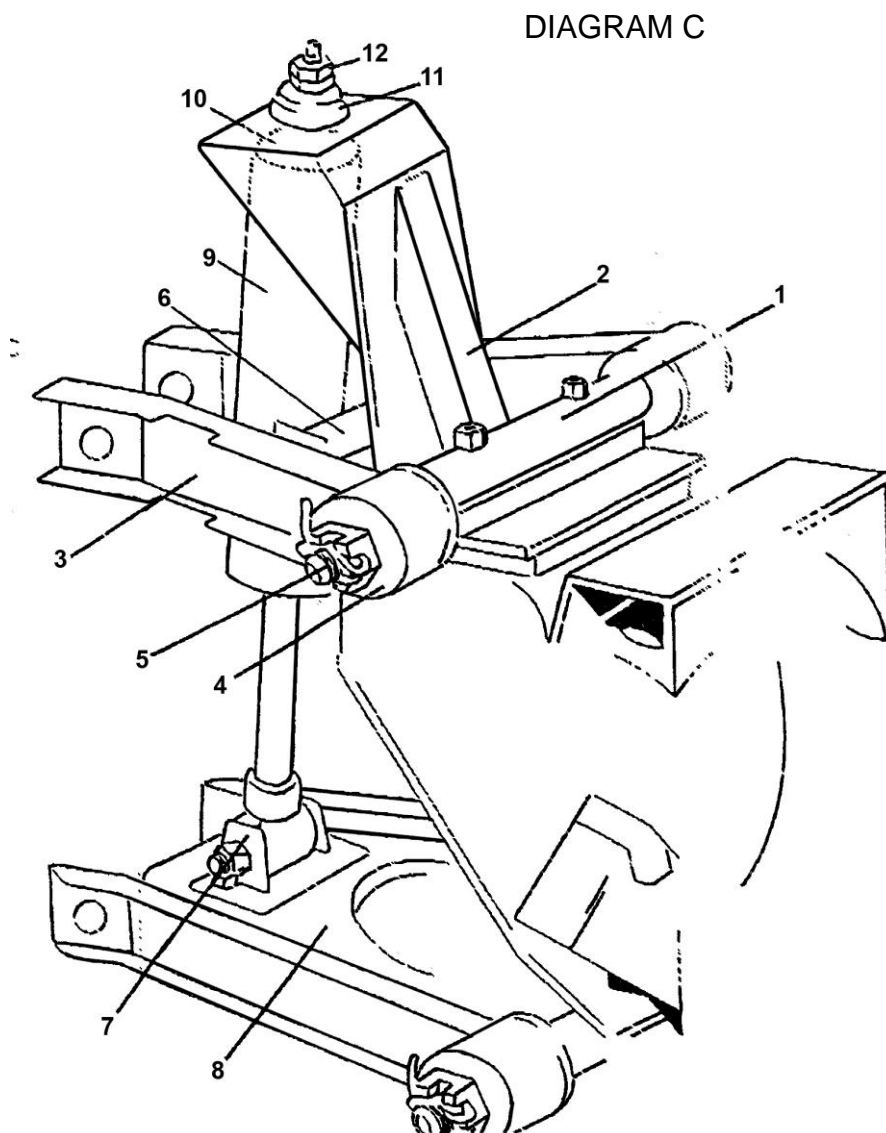
11. Connect the turrets to the crossmember in place of the old lever arm shock absorbers, using the 3/8" UNF x 1" bolts and spring washers. Tighten to a torque of 42lb.ft.

12. Loosely fit the two upper wishbone arms with scalloped cut-outs (3) onto the front side of the upper wishbone pivots (1), using the large washers (4), and castellated nuts (2). Grease pivots as appropriate.

13. Fit the rear upper wishbone arms (without scallop) onto the rear of the pivots as above. Grease pivots as appropriate.

14. Using the 5/16" UNF x 3/4" set screws, nyloc nuts and plain washers, loosely fit the cross braces (6) between the upper wishbone arms on each side, with the stiffening at the bottom.

15. Attach the stub axle and hub assemblies to the upper wishbone arms using the upper wishbone arms using the new bushes, castellated nuts and D-headed upper trunnion pins (inserted from the rear), taking care to locate the flat on the head against the shoulder on the upper wishbone arm.

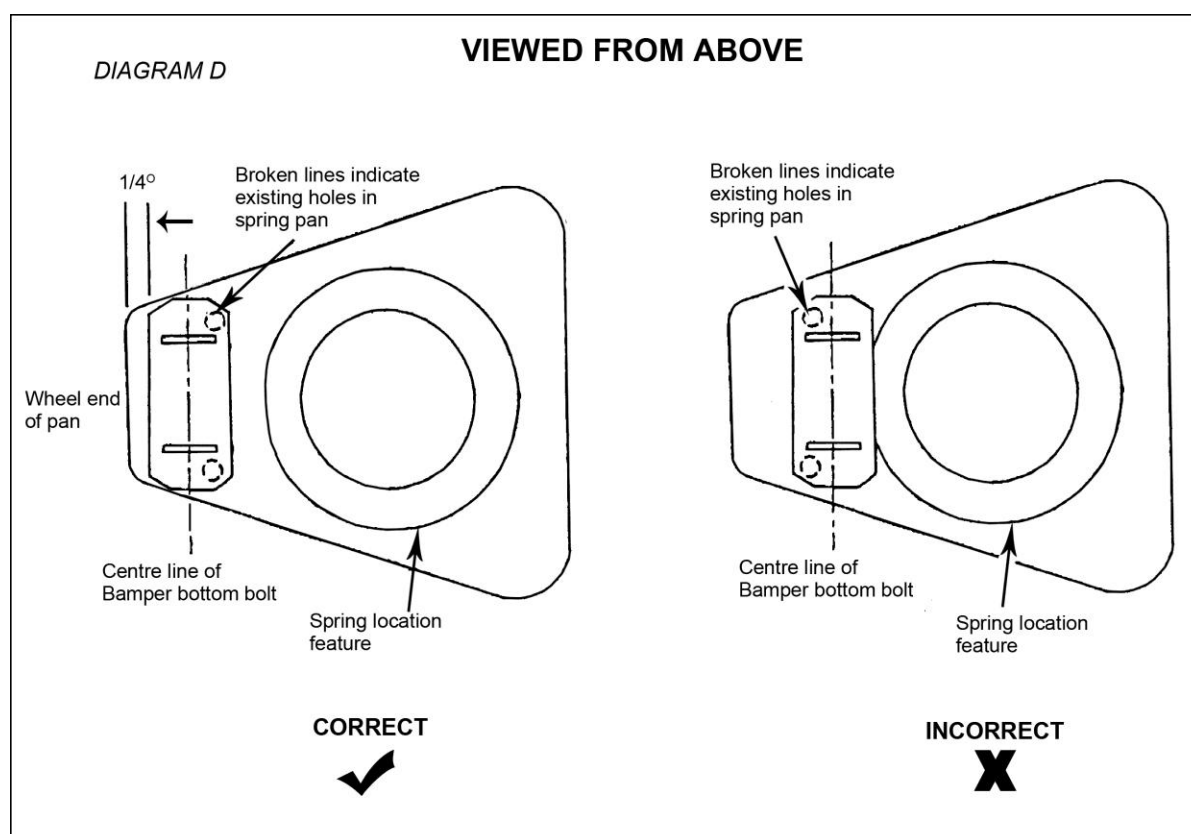


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16. Loosely re-connect the stub axle and hub assembly to the lower wishbone arms, ensuring that all the original components are in good condition.

17. Attach a lower Bilstein bracket (7) to a spring pan (8), as shown, using one of the 5/8" UNF X 3/4" shallow headed set screws and Binx nuts (nut uppermost) through the hole which is aligned. Ensure the bracket is square and in the correct position, as shown in diagram D. Drill the diagonally opposite hole in the spring pan from above, so that the bracket is used as a template and fit the other bolt in the same manner. Tighten these bolts to a torque of 35 lbft. Repeat for the other spring pan.

**DIAGRAM D**



18. Loosely refit the modified wishbone pans, fasteners should be tight enough to bring components together in correct positions but not fully tight. Fit the Bilstein shock absorbers (9) into the Turret Assembly, ensuring the positions of the lower (plain) rubber (10), the upper stepped rubber (11) and washers at the top are as indicated in Diagram C. At the lower end insert the 7/16" UNF X 2.5" bolts.

Ensure that there is adequate clearance of all suspension components, particularly the damper unit, throughout the full suspension travel.

19. Remove the Bilstein shock absorbers and wishbone pans.

20. Refit the coil springs and wishbone pans, and re-connect the anti roll bar links.



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21. Tighten all the remaining nuts and bolts in the following sequence to the indicated torque figure:-

Description	Size	Approx Torque
Lower link bolts	1/2" UNF x 3.625"	50lbft (fit split pins)
Lower Wishbone pan bolts	5/16" UNF x 0.75"	25lbft
Anti-roll bar link nuts	1/2" UNF	50lbft
D-head upper trunnion pins	7/16" UNF x 3.375"	40lbft
Upper wishbone pivot nuts	1/2" UNF	50lbft (fit split pins)
Cross brace set screws	5/16" UNF x 0.75"	25lbft

N.B. Refer to the Workshop Manual for any torque settings not referred to in these instructions

22. Fit the Bilstein shock absorber (9) into place. At the lower end insert the 7/16" UNF x 2.5" bolts and nyloc nuts with the plain washers under both the bolt head and nut. Tighten to a torque of 40ftlb.

23. Fit a 10mm nut (12) to the top stud of the Bilstein dampers and tighten sufficiently to 'nip-up' the bushes without distorting them. Lock with the other thin 12mm nuts.

24. Fit the brake pipe bracket extension pieces to the original brackets on the front crossmember using the 3/8" UNF x 3/4" set screws (head uppermost), nyloc nuts and plain washers, tighten to a torque of 30lbft.

25. Refit the flexible brake hoses and pipes onto the new brake pipe bracket extensions. Bleed the brakes.

26. Refit the track rod ends, and double check all fastenings.

27. Refit the road wheels and have the steering re-tracked.



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