



# NTG Motor Services Limited

282- 284 Bramford Road Ipswich Suffolk IP1 4AY

Tel 01473-406031 / 2  
Fax 01473-743133

Website [www.mgbits.com](http://www.mgbits.com)  
E-mail [sales@mgbits.com](mailto:sales@mgbits.com)

Directors: M.Green P.Banyard Company Reg.No. 1262476 V.A.T.Reg. No. 289 5422 17



## **MG TD TF 5 Speed Gearbox Conversion**

The MG T type 5 speed gearbox conversion kit has been developed as a further successor to the popular MGA and MGB 5 speed gearbox conversions. The kit is aimed at T type owners who really want to use their cars on modern roads including motorways and who do not want to be confined to secondary roads. The TD and TF models drive beautifully but when on fast modern roads the engine revolutions become altogether too high for economy, comfort and engine life.

Two kits are available to cover TD and TF models.

The conversion adapts a Ford Sierra Type 9 gearbox (5 speed, 1.6L & 1.8L: 1982-91, & 2.0L: 1982-87) to the XPAG and XPEG engines.

To enable the Ford gearbox to be fitted to the vehicle, the engine has to be moved approximately 10mm forward.

The kit has all the parts to enable this to be achieved safely and reliably together with all fasteners and fitting instructions for the competent owner to fit. The Type 9 Ford gearbox is not part of the kit but is either supplied by the owner or we can supply the gearbox from a quality gearbox reconditioning company. The vehicle speedometer will need calibrating. Several companies are able to do this. Instructions on how to measure the vehicle speedometer characteristics for re-calibration are included together with the details of a suitable company to do the work.

### **The Kit Comprises TD TF:**

1. Cast aluminium Bell Housing.
2. Gasket, Bell Housing to gearbox.
3. Spigot bush.
4. Rear rubber gearbox mounting.
5. Modified front rubber engine mounting.
6. New gearbox support crossmember.
7. Two crossmember side supports/lockplates.
8. Engine mounting packing plate.
9. Exhaust support bracket.
10. Engine torque reaction bracket/bolt.
11. Two floor rail support brackets.
12. Gear lever assembly, chrome.
13. Clutch plate (for 7¼" or 8" pressure plate).
14. Speedometer cable/circlip.
15. Brake pipe (RHD only).
16. Fan spacer (TF only) + bolts.
17. Modified front wing tie bar (TF only).
18. Propshaft.
19. Gearbox cover in moulded ABS.
20. All bolts and fasteners.
21. Detailed fitting instructions.
22. Loctite.





# NTG Motor Services Limited

282- 284 Bramford Road Ipswich Suffolk IP1 4AY

Tel 01473-406031 / 2  
Fax 01473-743133

Website [www.mgbits.com](http://www.mgbits.com)  
E-mail [sales@mgbits.com](mailto:sales@mgbits.com)

Directors: M.Green P.Banyard Company Reg.No. 1262476 V.A.T.Reg. No. 289 5422 17

The Bell Housing is cast in LM25 high strength heat treated aluminium alloy and is robustly constructed. The standard MG 7¼" or 8" clutch cover are re-used. The standard clutch release bearing and cross shaft system are all retained.

The gear lever sits in the same place as usual so the conversion is not easily detectable.

The gearbox supporting chassis tube is retained. The brackets welded to the tube have a small piece removed but will still be able to be re-used if needed.

Gear Ratios	TD/TF	Standard Ford	Modified Ford	Closer Ratio
First	3.5	3.65	2.98	3.36
Second	2.07	1.97	1.97	1.81
Third	1.385	1.37	1.37	1.26
Fourth	1.0	1.0	1.0	1.0
Fifth	-	0.82	0.82	0.825

The conversion transforms the car into a usable cruiser. Other benefits include improved fuel consumption, less driver and passenger fatigue, less vibration, longer engine life and fewer broken crankshafts! Motorway cruising is enhanced by the fifth gear.

### **TD axle ratio 5.125:1**

4th gear 14.42 mph/1000 rpm  
5th gear 17.60 mph/1000 rpm  
70 mph 4854 rpm (4th) ->3977 rpm (5th)

### **TD Mk2/TF axle ratio 4.875:1**

4th gear 15.16 mph/1000 rpm  
5th gear 18.48 mph/1000 rpm  
70 mph 4617 rpm (4th) ->3787 rpm (5th)

### **TF 1500 axle ratio 4.55:1 (Optional)**

4th gear 16.22 mph/1000 rpm  
5th gear 19.78 mph/1000 rpm  
70 mph 4315 rpm (4th) ->3538 rpm (5th)

The propeller shaft provided in the kit is to the original manufacturer's specification:

Torque: 570 Nm, 422lbft (short duration) MAXIMUM  
Speed: 7000 Rpm MAXIMUM.

This corresponds to 5740 engine rpm in fifth gear (ratio 0.82:1) and 7000 engine rpm in fourth gear (ratio 1:1). For any higher values of torque or speed please contact NTG Services Ltd.





# NTG Motor Services Limited

282- 284 Bramford Road Ipswich Suffolk IP1 4AY

Tel 01473-406031 / 2  
Fax 01473-743133

Website [www.mgbits.com](http://www.mgbits.com)  
E-mail [sales@mgbits.com](mailto:sales@mgbits.com)

Directors: M.Green P.Banyard Company Reg.No. 1262476 V.A.T.Reg. No. 289 5422 17

## **Note. Chronometric Speedometers (Early TD)**

This type of instrument is difficult to recalibrate. We are able to supply, to order, a small step up gearbox which will fit directly into the speedo cable entry point on the Ford type 9 gearbox. This gearbox will then drive the original cable to the speedometer. The owner sends his speedo together with calibration data obtained from the vehicle to NTG who will arrange to have the instrument checked and supply the step up gearbox with correct ratio for accurate speed indication.





# NTG Motor Services Limited

282- 284 Bramford Road Ipswich Suffolk IP1 4AY

Tel 01473-406031 / 2  
Fax 01473-743133

Website [www.mgbits.com](http://www.mgbits.com)  
E-mail [sales@mgbits.com](mailto:sales@mgbits.com)

Directors: M.Green P.Banyard Company Reg.No. 1262476 V.A.T.Reg. No. 289 5422 17

## TD/TF 5-SPEED QUESTIONNAIRE

(Please complete the appropriate boxes or mark YES/NO)

**YEAR OF MANUFACTURE**

ENGINE NUMBER

CHASSIS NUMBER

**MODEL**

TD

(AFFECTS PARTS COUNT)

TF

**RIGHT OR LEFT HAND DRIVE**

RHD

a) Affects speedo cable length

b) Mountings

LHD

c) brake pipe

**CLUTCH SIZE**

7 1/4"

Affects bell housing type

8"

All TFs should have 8" clutch, but occasionally they have the 7 1/4", fitted by availability of engine etc. Please check carefully.

### IDENTIFICATION

7 1/4" Clutch has 5/8" (16mm) cross shaft

8" Clutch has 3/4" (19mm) cross shaft

