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Fitting Instruction Differential Strengthening Kit

FI057

Fitting Instruction for Differential Strengthening Kit For fitment with body detached RTR7012-1K For fitment with body in situ RTR7012-2K

Note: - Read all these instructions before commencing work to avoid making costly mistakes.

Before You Start

It is essential that these Instructions should be fully read, referring where necessary to the appropriate original Triumph Workshop Manuals and/or Parts Books for the relevant car, prior to commencing work. Copies of these manuals in Paper form or on CD are available from Revington TR if required.

Language

These Instructions are written in the English language and assume that the reader has a full competence in that Language and the technical terms and Safety Advice used therein. If there is any doubt of interpretation of any of these instructions, then advice should be sought from Revington TR or other competent authority.

Safety

Your Safety and that of the users of the vehicle to which these products are to be fitted and all other Road Users and members of the General public is paramount. Accordingly the fitment of these products should only be undertaken by persons who are competent skilled vehicle technicians and will execute the work in accordance with accepted standards of safety and quality of workmanship. All work should be undertaken with the correct tools, which must be in good and serviceable condition. Where applicable reference should be made to all safety instructions contained in the original Triumph Workshop Publications.

Note 1. This kit requires welding, never weld alone, always have a firewatcher at hand. Revington TR strongly recommends removing the petrol tank and storing it outside during the welding operation. Welding is an extremely dangerous operation, only consider this job if you are fully confident, If not seek professional assistance.

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Differential Strengthening Kit

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A Parts List

Have you got all the parts you need?

Before you start work, please read the Parts List below and check that all items for your car are present. If there are any discrepancies, please notify the Revington TR Parts Department Immediately.

THE REVINGTON TR DIFF SUPPORT STRENGTHENING KIT CONSISTS OF: -

ITEM	PART No.	DESCRIPTION	QTY	CHECK		
Includ	Included in both kits:					
1	RTR1002	Gusset	2	()		
2	RTR7054	Damper reinforcement plate	2	()		
3	RTR7056	Side plates front pins	4	()		
4	RTR7057	Side plates rear pin	4	()		
Included in Kit RTR7012-1K only:						
5	RTR7053	Forward pin top reinforcement on top of bridge	2	()		
6	RTR7055	Rear pin top reinforcement on top of bridge	2	()		
Includ	Included in Kit RTR7012-2K only:					
7	RTR7187	Forward/Rear Pin top reinforcement under bridge	4	()		

B Tools/Equipment required

ITEM	DESCRIPTION	QTY	CHECK
1	ENGLISH SPANNERS AND SOCKETS	A/R	()
2	TORQUE WRENCH	1	()
3	WELDING EQUIPMENT	1	()
4	PAINT BRUSHES AND PAINT	1	()
5	TROLLY JACK AND AXLE STANDS	1	()
6	GRINDER AND SCRAPERS	1	()

C Additional Parts that May be Required

ITEM	PART NO.	DESCRIPTION	QTY
1	SPF0138AVK	TR4A SuperPro Polyurethane Differential Mountings	1
2	SPF0138K	TR5-6 Front SuperPro Polyurethane Differential Mountings	1
3	SPF1992K	TR5-6 Rear SuperPro Polyurethane Differential Mountings	1
4	107960	Prop Shaft Bolt	12
5	NY606151	Nyloc Nut	12

Note: There are 2 versions of this kit, one for fitting with the body assembled onto the chassis (RTR7012-2K) and one with the chassis bare (RTR7012-1K). These instructions assume that unless otherwise stated, the body is in place. The difference between the two kits is that the top plates that reinforce the differential support pins are ideally welded in place on the top of the bridges. However this is not possible with the body in place so a different method has to be employed. In kit RTR7012-2K smaller reinforcing plates are supplied which can be fitted from underneath.

Preparation

- 1. Jack the car up and set on stands.
- 2. Remove the exhaust and differential as necessary, to gain access to the differential chassis mountings.
- 3. Clean the areas of the chassis to a standard that will result in good welds.
- **4.** Inspect carefully the mountings and the parent chassis, looking for cracks. Figure 3 (Page 5) shows a typical front mounting cracked in half. This will be welded up and ground back prior to fitting the strengtheners.
- 5. If the pins or brackets require welding to effect a repair it is imperative that with the repair tack welded together, the differential is offered up to the chassis with new SuperPro Polyurethane mountings to ensure that pins and brackets are in the correct place and that enough thread protrudes to allow the correct washers and nyloc nuts to be assembled. See Table C Above.

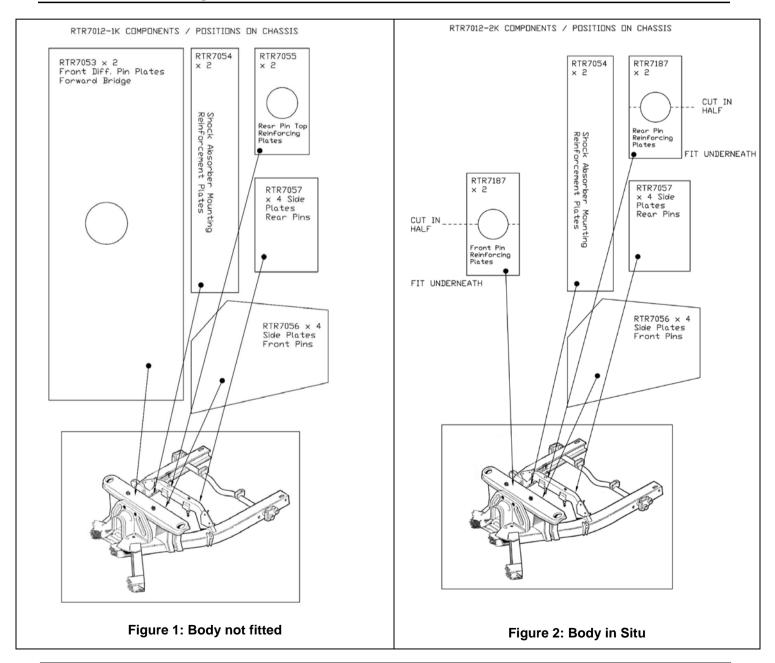
Assembly

1. Refer to Figure 1, if your chassis is bare weld on the components in the positions shown.



- 2. If your body is attached to the chassis (refer to Figure 2) all the work will have to be done from below. For this to be done 4 of Item 7 need to be cut in half to be fitted around the pins.
- 3. After fitting Items 3 and 4 it is necessary to drill a hole in 1 corner so that wax can be injected and water can get out. Note: Don't expect that because you have welded all the way round that water will not get in, it WILL. It is better that the water can get out, rather then having it trapped.
- **4.** The front plate of the differential can also crack. We have provided 2 gussets (**Item 1**) which need to be welded to the front plate in accordance with Figure 18, 19, 20.
- 5. Reassemble using new Prop Bolts and Nyloc Nuts, see Table C Above.

Chassis Position Figures





Pictures for Strengthening Kit RTR7012-1K and RTR7012-2K



Figure 3: Typical Front Mounting Cracked in Half



Figure 4: Item 5 Placed Above the Forward Bridge for Use with the **Body Removed**



Figure 5: Item 7 Before Cutting in Half Placed Under the Forward Bridge for Use with the Body **Fitted**



Figure 6: Half of Item 7 After **Cutting Placed Under the Forward** Bridge for Use with the Body **Fitted**



Figure 7: Half of Item 7 Welded in Place Under the Forward Bridge for Use with the Body Fitted



Figure 8: Item 6 Placed Above the Rear Bridge for Use with the Body Removed



Figure 9: Item 7 Before Cutting in Half Placed Under the Rear Bridge for Use with the Body Fitted



Figure 10: Half of Item 7 After **Cutting Placed Under the Rear** Bridge for Use with the Body Fitted



Figure 11: Item 3 Placed on the Forward Bridge Body Removed



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Figure 12: Item 3 Placed on the Forward Bridge Body Fitted



Figure 13: Item 4 Placed on the **Rear Bridge Body Removed**



Figure 14: Item 4 Placed on the **Rear Bridge Body Fitted**



Figure 15: Item 2 Placed on the **Rear Bridge Body Removed**



Figure 16: Item 2 Placed on the **Rear Bridge Body Fitted**



Figure 17: Item 2 Welded in Place to the Rear Bridge Body Fitted

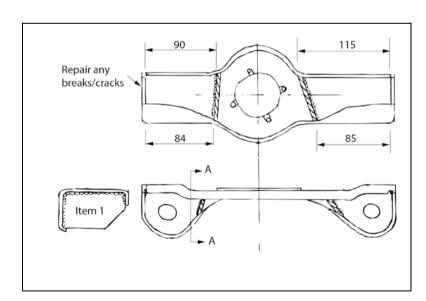


Figure 18: Drawing Showing Positioning of Item 1



Figure 19: Item 1 Placed on Front Mount



Figure 20: Item 1 Welded on the Front Mount