TOWBAR **R51U** For MG-ZS 2017-

#### **MATERIALS**

Α	1	Cross Bar	
В	1	Side Arm	
C	1	Side Arm	

D 1 Rectangular Washer

E 1 M12 x 30 x 1.75 Bolts, Lock Washer, and Witter Cage Nut

F 1 M12 x 30 x 1.75 Bolts, Lock Washer, Ø40 Plain Washer and Witter Cage Nut G 4 M8 x 1.25 Spigot Nut, 10mm I.D. Lock Washers and 10mm I.D. Plain Washers

H 4 M10 x 35 x 1.5 Bolts, Lock Washers, Nuts and 2 Flat Washers

J 4 M12 x 30 x 1.75 Bolts, Lock Washers and Nuts

ZE 1 Retractable Electrical Plate

SCP 1 Safety Chain Plate Kit

ZN 1 Neck Kit

#### **FITTING**

- 1. Remove each rear light cluster.
- 2. Remove bumper
- 3. Remove Steel Bumper beam.
- 4. Lower exhaust silencer from both support rubbers and remove heat shield from underside of vehicle floor pan.
- 5. Pre-assemble Witter Cage Nuts (E & F) to Each Side Arm (B & C) using separate cage nut instructions.
- 6. Insert Side Arms (B & C) into open ends of chassis rails until they align with the large holes in the base of the Chassis Rail, and located over the threaded studs on the vehicle rear panel. (Notice the identifying holes in Part (C) )
- 7. Loosely secure each Side Arm (B & C) at their forward-most mounting with fasteners (E & F) through the bottom face of each chassis rail.

(Note: Use Rectangular Washer (D) on nearside chassis rail, in the orientation shown, so that access is still possible to the heatshield fastener hole in that area.)

- 8. Complete assembly of Side Arms to vehicle by loosely assembling fasteners (G & H)
- **9.** Temporarily assemble Cross Bar (A) to each Side Arm (B & C) using one fastener (J) at each end. Ensure the gap between the Cross Bar ends and each sidearm is removed to correctly locate each Side Arm.
- **10.** Fully tighten fasteners (H, E & F) for each Side Arm.
- 11. Remove Cross Bar and Fully Tighten Fasteners (G) for each Side Arm.
- 12. Re-assemble Cross Bar (A) to each Side Arm (B & C) using fasteners (J)
- **13.** Assemble the Chosen Neck Kit (ZN), Safety Chain Plate (SCP) and Electrical Plate (ZE) to Cross Bar (A) using fasteners in the Neck Kit and Safety Chain Plate Kit.

(Note: Shorter fasteners required on Safety Chain Plate side if using a Detachable Neck kit)

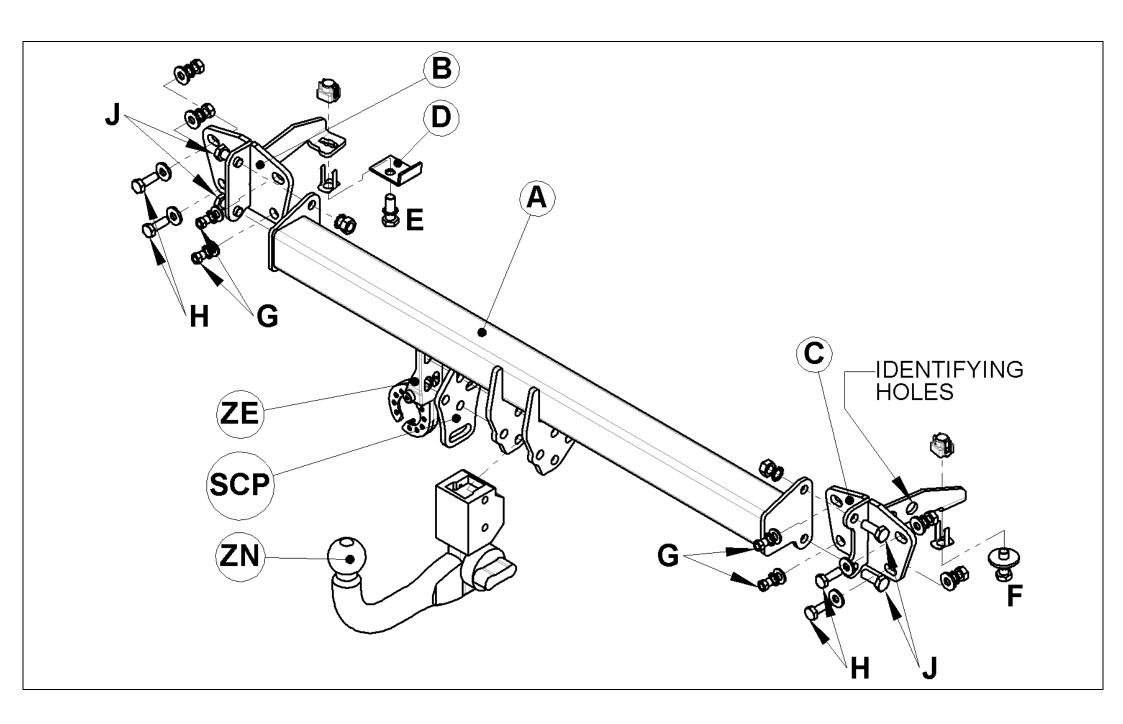
- 14. Fully tighten all Fasteners
- **15.** Refit exhaust heat shield, re-forming around fastener (E) in the process
- **16.** Refit exhaust silencer to it's support rubbers
- 17. Refit Bumper

Recommended torque settings:

Grade 8.8 bolts: M8 - 24Nm, M10 - 52 Nm, M12 - 80 Nm, M14 - 130 Nm, M16 - 200 Nm

**Grade 10.9:** M12 – 120Nm, M10 – 70Nm M8- 35Nm

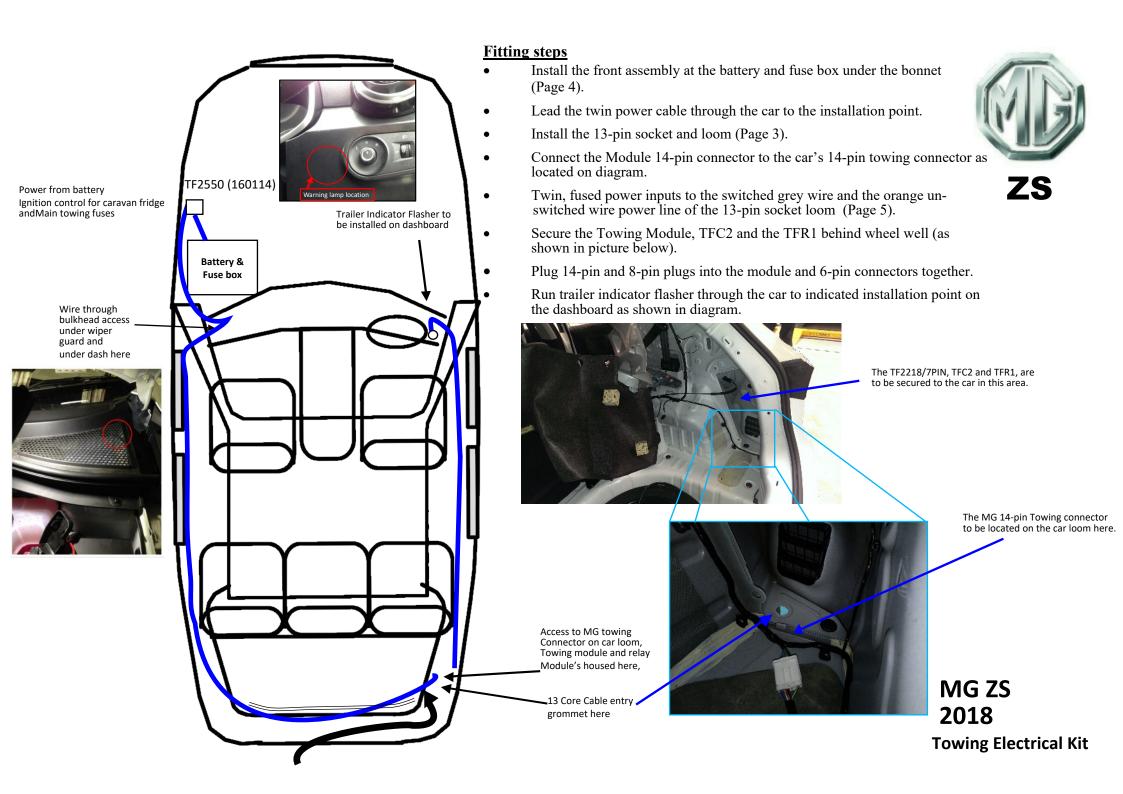




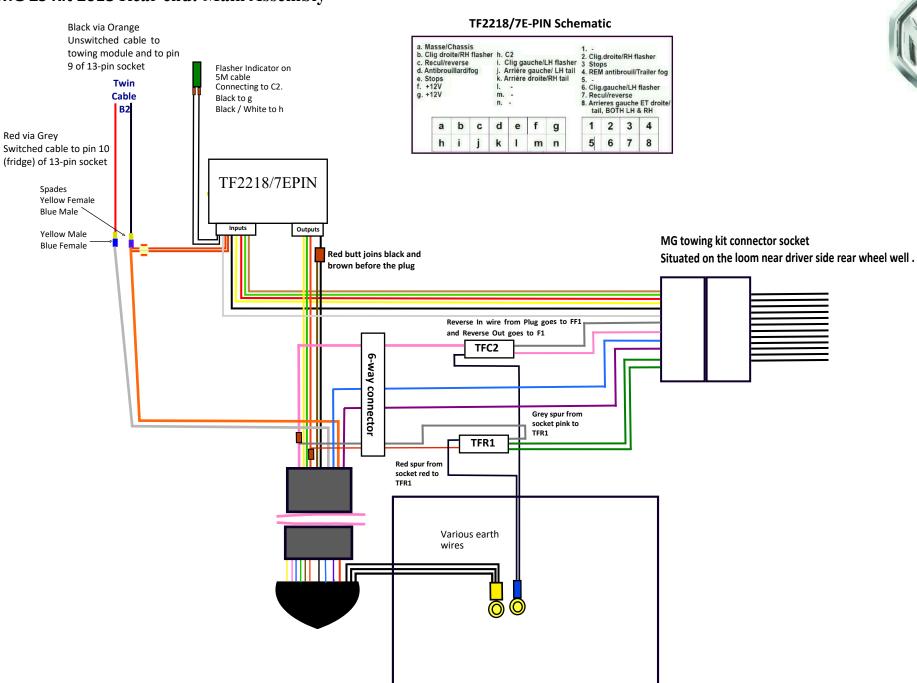
# **MG ZS Towing Electrical Kit Installation Guide 2018**





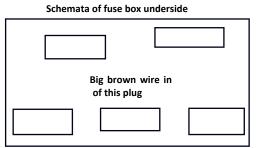


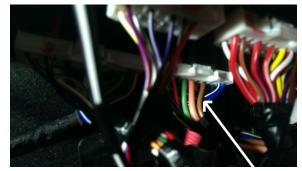
# MG ZS Kit 2018 Rear end: Main Assembly





### MG ZS Kit 2018 Front end



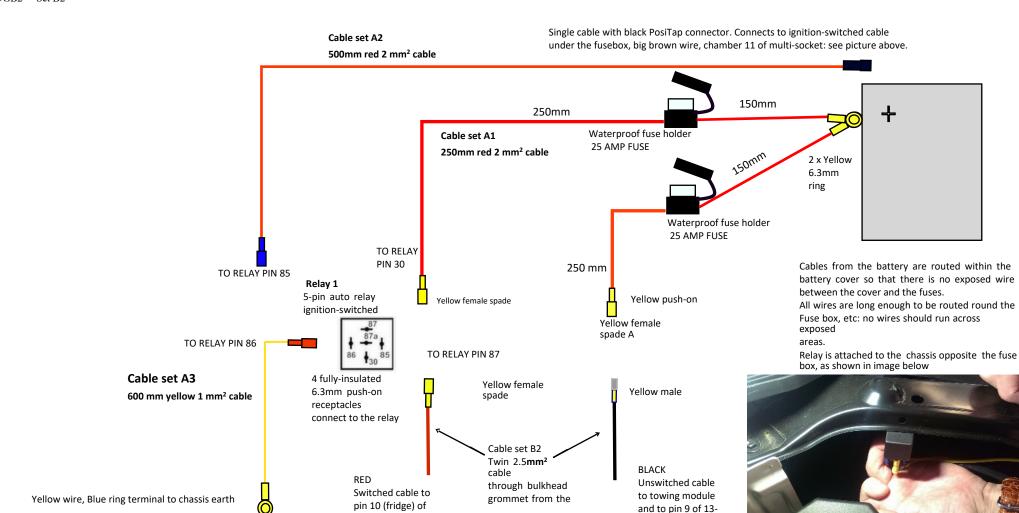




ZS

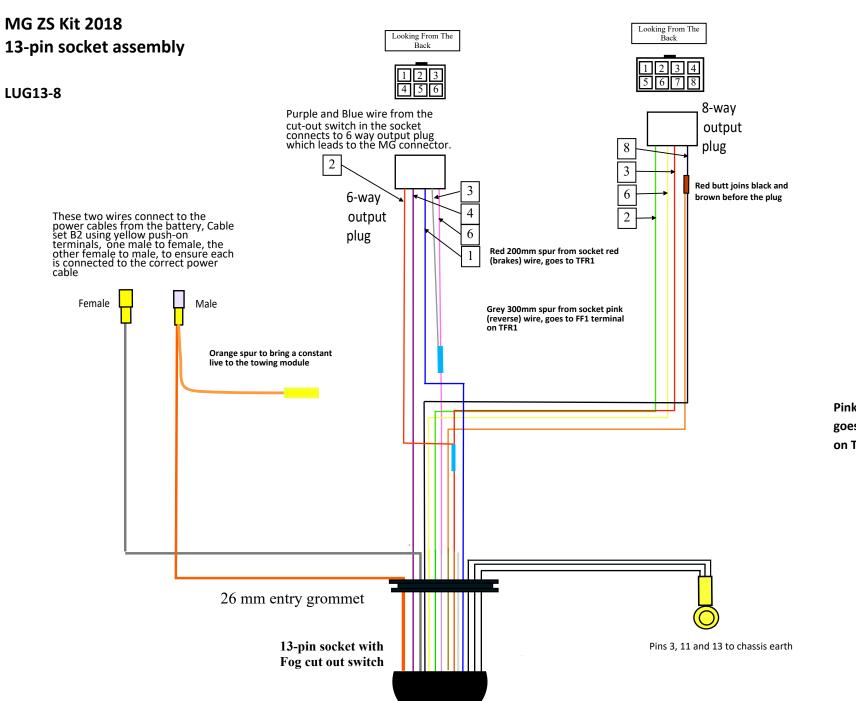
LUGA1 Sets A1, A2, A3

LUGB2 Set B2



pin socket

13-pin socket



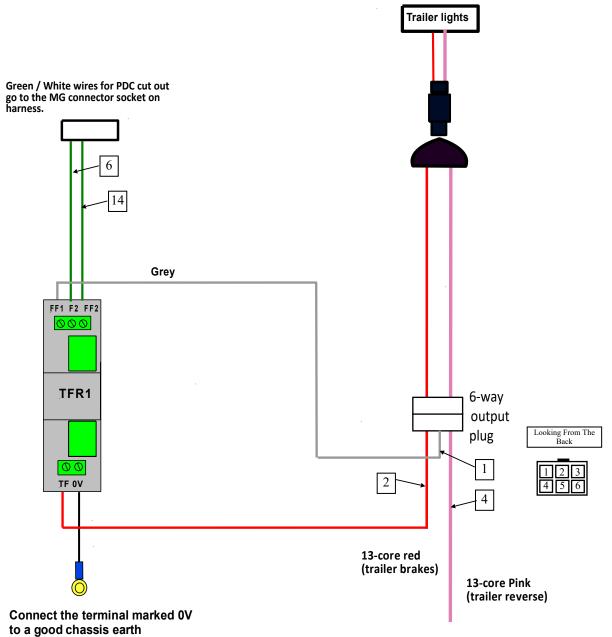


ZS

Pink Reverse wire goes to TF terminal on TFC2

### **MG ZS Kit 2018**

# Connecting the TFR1, PDC sensor cut-out

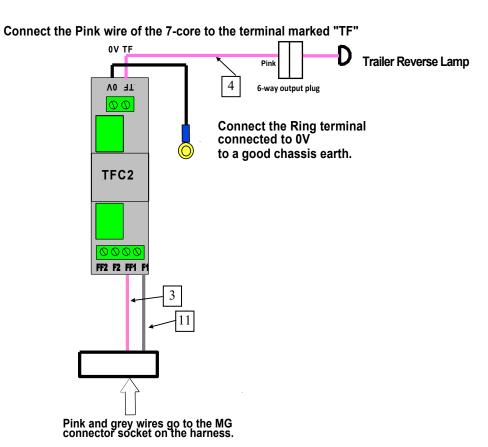




# **Connecting the TFC1, Reverse Bulb cut-out**



# TFC2 Bulb cut-out relay



# Cable set A1 500mm red 2 mm<sup>2</sup> cable Black PosiTap Connects to ignition-switched cable under the fusebox Yellow male spade to yellow female spade A Yellow female spade to relay pin 87 Cable set A3 600 mm yellow 2 mm<sup>2</sup> cable Blue 6.3mm push-on LUGA1 Sets A1, A2, A3 LUGB2 Set B2 Blue 6.3mm ring Cable set B2 5m 2.5mm twin Cable set A2 2 x Yellow 6.3mm ring 250 mm 150mm Waterproof fuse holder 25 AMP FUSE 150mm Waterproof fuse holder 25 AMP FUSE 250 mm Yellow male Yellow push-on Yellow female spade to orange cable to 13-pin spade to grey wire to 13-pin socket, pin 10 TO RELAY PIN 30 Yellow push-on socket pin 9

# MG ZS kit 2018

## **Fitting notes**

#### Ignition-switched feed to relay 1

Unclip the fuse box at A4 to access multi-plugs on the underside.

Use a black PosiTap connector to join Cable A to the Brown cable, located on middle multi socket in Chamber 11, as shown in picture and diagram on page 3

#### **Bulkhead access**

There is a bulkhead access point under the passenger side wiper guard, that leads from the engine compartment to under the dashboard in the passenger side foot well. As shown in the diagram on page 2.

#### **Unswitched feed to Towing Module**

This feed is taken from the unswitched orange socket wire

#### **Cutting out the reversing sensor**

This is done by cutting the earth wire of the little CPU that controls the reversing sensors. TFR1 is a cut-out relay connected to the reverse feed to the trailer. It only activates when a trailer is connected.

#### Important note

Make sure the 13-pin socket is bolted tightly to the mounting plate. This ensures the correct operation of the cut-out switch.

#### Components

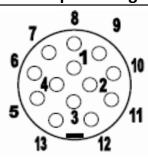
•	Posi-Taps, Black	1
•	ATO fuses 25 amp	2
•	ATO fuses 10 amp	2
•	MG-specific connectors + crimps	2 pairs
•	30mm M5 screws and nuts	3

#### Relays/module/etc

nelays/	module/etc.	
•	TF2218/7EPIN	1
•	TF2550 5-pin relay	1
•	TFR1 Reverse sensor cut out	1
•	TF1313PWUPF 13-pin pw socket	1
	with fog cut-out	
•	TV1602 Mini huzzer	1



# 13-pin wiring



* The colours from 8 to 13 are not standard across all suppliers					
Pin	Cable colour*	Function	8-pin relay plug - pin:		
1	Yellow	LH flasher	6		
2	Blue	Fog lights	Diode set		
3	White	Earth (For 12N)	Ring		
4	Green	RH flasher	2		
5	Brown	RH tail light	8		
6	Red	Brake lights	3		
7	Black	LH tail light	8		
8	Pink	Reversing light	7		
9	Orange	Constant live			
10	Grey	Ignition-controlled power supply			
11	White/black	Earth (for pin 10)-	Ring		
12	Blank				
13	White/red	Earth (for pin 9)	Ring		
14	White/blue	Cut-out			



ZS

	14-way relay plug						
Pin	Cable colour*	Function	in MG XS kit				
а	White	Chassis / Earth					
b	Green	RH Flasher					
С	Blank						
d	Blank						
е	Red	Brakes					
f	Orange	Power in, fused	To unswitched power line				
g	Orange	Power in, fused	To unswitched power line	Also to positive of TV1600			
h	C2	To Neg of TV1600					
i	Yellow	LH Flasher					
j	Black	LH Tail					
k	Brown	RH Tail					

# **Component Assemblies**

LUGA1 LUGA2 LUGTEE/LUGTEE14 LUGC3 LUG13-8 LUGFCO

### Also

TF2218/7E-PIN TFR1 TF2250