



# INSTALLATION GUIDE

## **BBT016/ BBC016/ BBBCD016**

MITSUBISHI ML TRITON

## **BBT031/ BBC031/ BBBCD031**

MITSUBISHI MN TRITON



- Ironman 4x4 BBT/ BBC/ BBBCD016 Bull Bars fit to a Mitsubishi ML Triton.
- Ironman 4x4 BBT/ BBC/ BBBCD031 Bull Bars fit to a Mitsubishi MN Triton.
- It will take about 3 hours to install.

**NOTE:** This product has been tested for air bag compatibility and therefore the mounting system **MUST NOT** be modified

**IMPORTANT:** Bull Bar installations should only be done by a qualified person and it is the responsibility of this person to ensure correct fitment.

1. Before installation check bull bar application is compatible with your vehicle.

2. Carefully remove front flares and front grill sections and store in a safe place for later re fitment.

3. Remove front bumper bar.



4. Remove front sections of mudguard liner and inner and outer support brackets.

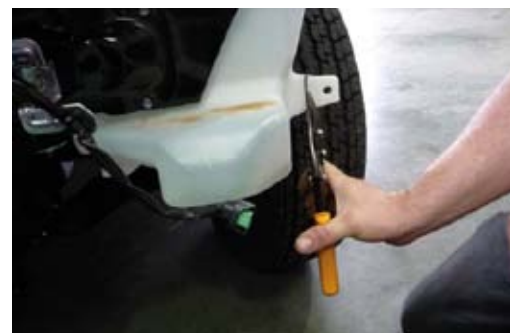
NOTE: To remove the outer support bracket on the washer bottle side undo three bolts holding washer bottle in place. Gently move the washer bottle towards the wheel to allow access to the bolts holding the support bracket.

Once the bracket is removed, refit the washer bottle using the two inner bolts.



Inner & Outer Support Brackets

5. Carefully cut the mounting tag off the outside of the washer bottle taking care not to puncture the bottle.



6. Remove the lower grill and fog light assemblies from the bumper bar.

CUT THE BUMPER BAR AS SHOWN BELOW.  
REFER TO YOUR SPECIFIC MODEL.

## ML Triton

1. Mark bumper as shown. Be sure to retain the inner guard mounting eyelet above the cut line.



2. Cut to remove lower section of bumper bar.  
Be sure to retain the inner guard mounting eyelet above the cut line.



3. Bumper bar after cut.



CUT THE BUMPER BAR AS SHOWN BELOW.  
REFER TO YOUR SPECIFIC MODEL.

## MN Triton

1. Mark bumper as shown. Be sure to retain the inner guard mounting eyelet above the cut line.



2. Cut to remove lower section of bumper bar.  
Be sure to retain the inner guard mounting eyelet above the cut line.



3. Bumper bar after cut.



4. Refit top section of bumper bar.

5. Install captive bolt supplied to chassis as shown.



6. Attach chassis strengthening brackets as shown using nuts, bolts and U-bolts provided.

Do NOT tighten.



7. Install mounting cradle as shown. Tighten all bolts.



8. If winch is being installed, refer to winch installation instructions Pages 7 - 10.

9. Unwrap bull bar. Check over riders and light assemblies are tight in bull bar before installation.

10. Fit bull bar to chassis brackets using M12 bolts, flat washers, spring washers and nuts provided.

11. Align bull bar with vehicle and tighten all bolts.

12. Once bar is aligned with vehicle and tightened, drill through pinning holes between bull bar and chassis bracket and secure with bolts, washers and nuts provided.



13. Temporarily refit the flares to the vehicle allowing the flares to sit over the outside of the bull bar wing. Mark the flare parallel to the top surface of the bar allowing approximately a 5-10mm gap between the bar and the flare.



14. Remove flares and cut along line previously marked.

15. Refit flares. Check bull bar clearance and re-trim if required.



16. Connect park lights, indicators and fog lights as per wiring diagrams on page 11 of Instruction Guide.

17. Refit front sections of mudguard liners.

18. Fit protection plates underneath the bull bar using M8 bolts, spring washers and flat washers provided and trim guards liners to suit.



# Winch Installation

**IMPORTANT:** Before winch is installed to winch cradle, the clutch handle will need to be rotated to a more convenient position for access through bull bar.

1. Stand winch vertically on motor with gearbox facing upwards.



2. Undo and remove two chrome Allen head bolts which hold the gearbox to the tie rods.



3. Lift gearbox off winch.



**NOTE:** If shaft comes out of cable drum remove it from the gearbox and place it back into the drum making sure it engages with the brake.





NOTE: Also make sure that the drum support bush remains in the end of the drum support housing with the locating tang in the correct position.



4. Undo and remove 10 Allen head bolts that hold the gearbox housing to the drum support housing and rotate the drum support housing to the desired location.

For most Ironman 4X4 bull bars the gearbox will need to be rotated 2 holes in an anti clockwise direction. Make sure the gearbox gasket does not tear.



5. Re-install 10 bolts and tighten firmly.  
NOTE: Take care not to over-tighten.

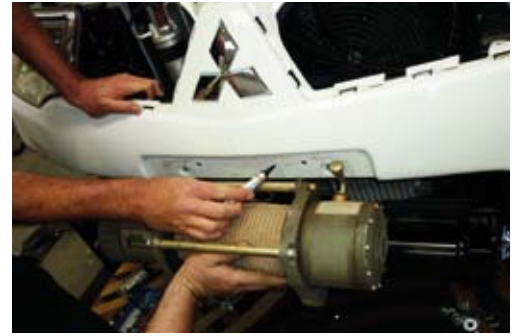


6. Refit gearbox to winch, refit and tighten Allen head bolts into tie rods.



7. Before winch can be bolted to cradle, a section of bumper bar will need to be removed.

To do this temporarily position winch on cradle and trace around winch onto front bumper and remove section.



8. Bolt winch to cradle with gearbox to the left hand side of vehicle and cable spooling from bottom of the cable drum using bolts and washers provided.



9. Bolt roller fairlead to recess in front of bull bar using bolts, washers and nuts provided.



10. Fit bull bar to vehicle referring to steps 12 - 21 of bull bar fitting instructions.

11. If winch control box is being fitted to top of bull bar remove control box bracket from control box.

12. Place control box on top of centre pan of bull bar with socket for hand controller facing outwards from vehicle. Mark position of the four mounting bolts.

Drill four holes to 6.5mm. Rust proof and de burr and attach control box to bar.



13. Connect three colour coded cables to the corresponding poles on winch motor.



14. Connect the thin black earth wire and negative battery cable to the earth connection on the opposite side of winch motor.



15. Run the positive and negative battery cables into the engine bay taking care to secure cables away from any sharp or moving objects.

Connect negative battery cable to the main battery.

16. Find a convenient location close to main battery to mount battery isolation switch.

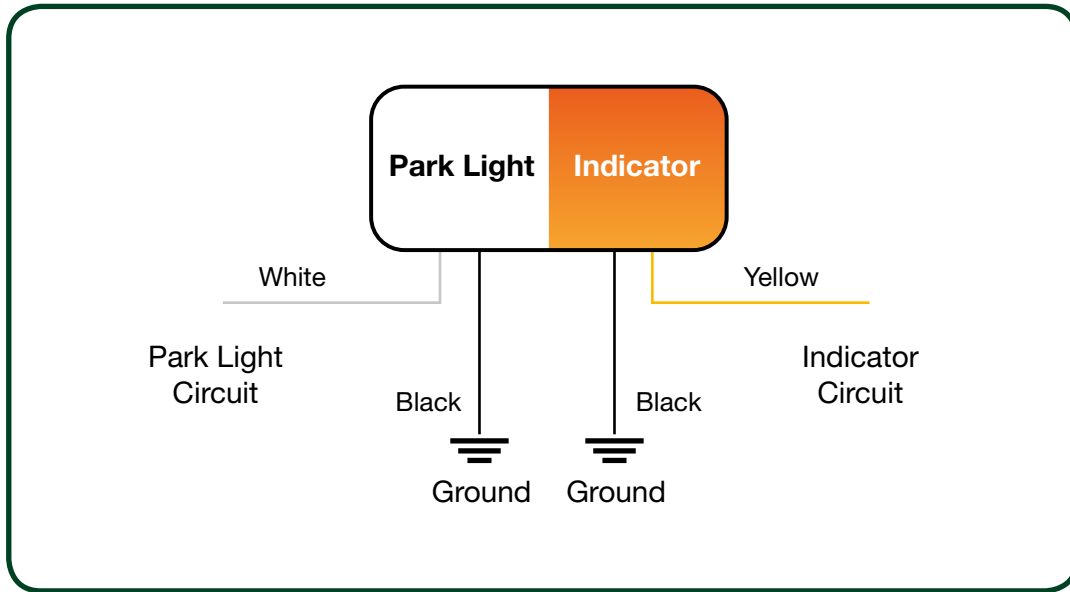
Connect positive battery cable to one side of isolation switch and connect other side to the positive battery terminal of main battery.



17. Once completed, refer back to step 12 of bull bar fitting instructions.

# Wiring Diagrams

## PARK LIGHT & INDICATOR



## FOG LIGHTS

