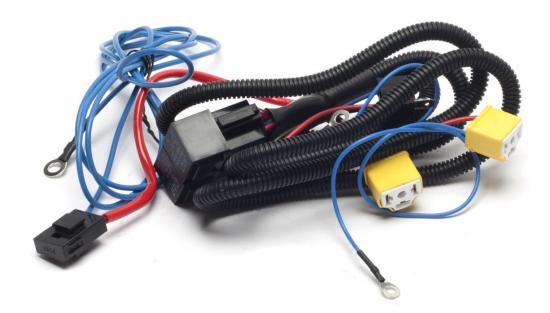


Fitting Instructions for High Performance Wiring Harness Kit

READ ALL INSTRUCTIONS COMPLETELY BEFORE BEGINNING!



INSTALLATION AND USER MANUAL

Do not use high beam headlamps in traffic. This includes all extra high beam headlamps, even with the full/partial high beam switch in the "off" position. It is dangerous and obnoxious to use your lamps in a manner that creates glare for other drivers.

Introduction

This high performance headlamp harness is used for standard and wattage headlamp upgrades, visual improvements are also noticed with low wattage applications where the original vehicle wiring is inadequate. On many vehicles, power for the headlamps is controlled and directed via a switch on the steering column. This is not the best way to provide power to the headlamp systems for two reasons:

1. The headlamp switch directly feeds the lamps using tiny, high-resistance contacts to complete the circuit. When you make or break a contact carrying multiple amps, a spark is generated across the contacts. Over time this spark damages the contact and resistance builds up. This resistance in the switch becomes a factor and transforms into heat; the connectors become hot. This heat promotes further decay of the contact and it's (plastic) housing until eventually the connector and/or switch fail, short circuit —or worse, catch fire.

continued on next page

Part Nr. RNA0330

Fits:
Series
Defender
Range Rover Classic
Discovery I
Discovery II w/H4 Bulb

Suggested Tools:

- 13mm socket for disconneting battery
- Various size sockets to bolt to positive lead on battery and negative grounds as required
- Eye protection

Optional items:

- Latex or similar gloves
- Zip ties
- Electrical tape



Various Sockets, Wrenches

Zip-ties



Safety Glasses

ROVERS NORTH

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2. The wire lengths required to run from the battery via the main loom to the dashboard and all the way out to the headlamps creates an excessive resistance voltage drop, especially with the thin wires used in the factory installation loom, pushing the wires and the loom to it's limits. In many cases, the thin factory wires are inadequate even for the stock headlamp equipment. Headlamp bulb light output is severely compromised with decreased voltage. This will result in less light output and puts even more strain on the liaht switch.

The harness: The high performance upgrade wiring harness is developed to undo both previous mentioned problems, whilst keeping the functionality of your original electrical harness intact. No cutting or modification is needed to implement the harness in your Land Rover and the main loom stays intact! The original headlamp switch

is used with a low current to activate the power to the relays of either the high or low beam depending on the position of the switch. The relays switch the high current needed to ignite the headlamps. The harness is fitted with two industrial grade relays, each capable of switching a current of 40A, supporting headlamps with a combined power dissipation up to 450 watts!

Extra Safety: To guarantee safe usage of the wiring harness and protect the vehicle's electrical parts, the feed to the really is equipped with a 40A blade fuse. The system incorporates a fuse at the power supply side of the headlamp power circuit. Connect the feed directly to the power takeoff point (battery or alternator, + terminal). The premium high current H4 connectors are made of ceramic material to provide extra safety in regard to the hot lamp bulbs.

Installation:

The high performance headlamp harness is designed to give maximum power to standard and uprated headlamps or to relocated the headlamps to a remote location. The harness uses dedicated relays to transfer power directly from the battery or alternator, to the bulbs of the headlamps and protects the vehicles original electrical system from overloading.

To install the harness, please follow these steps:

Step 1. Make sure the engine is turned off and disconnect the battery.

Step 2. Mount the relays in a suitable location between the battery or battery source and the headlamps.

Step 3. Route the feed to the fuse wire to a battery source. On a Defender, the left chassis leg is a good location to place the feed wire on. Guide the fuse through one of the grommets of the sweatbox that houses the battery. The fuse should be placed in the area right next to the battery. Step 4. Route the headlamp earth wire with a ring connector to a ground source.

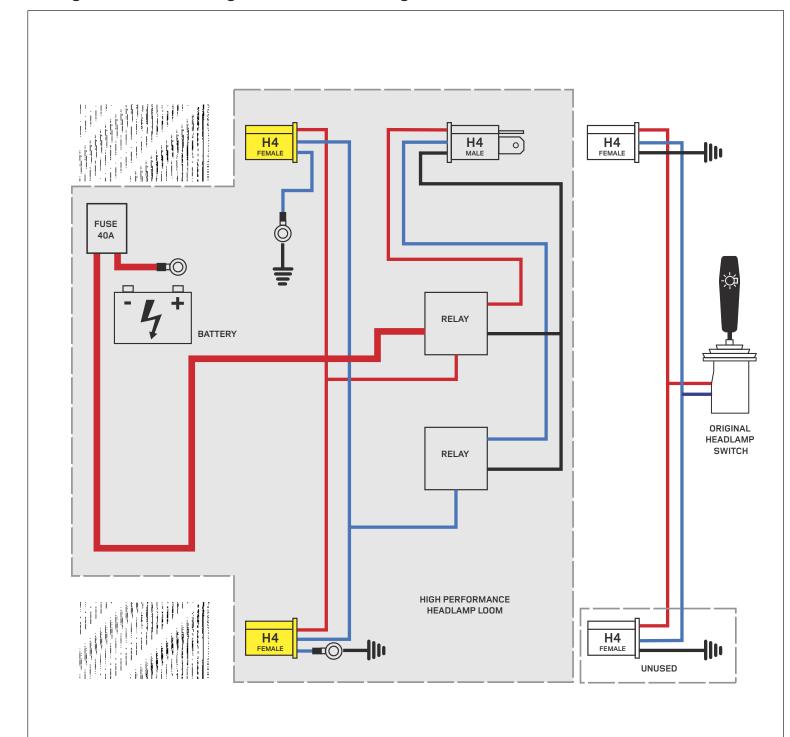
Step 5. Unplug the H4 headlamp connector from one (1) headlamp bulb. Plug in the removed (make headlamp connector into the female connector of the harness.

Step 6. Unplug the second H4 headlamp connector, insulate with tape and store this female connector.

Step 7. Plug the two (2) new headlamp connectors of the harness onto the headlamp bulbs.

Step 8. Reconnect the battery.

Step 9. Turn on the headlamps and check for proper operation of the high/low beam.



High Performance Wiring Harness Diagram

Technical specifications:

Supply: 12V

Max. current (fuse): 40A

Material: copper

Relay: industrial grade, 100,000 cycles.

Cable length: 1.5 meter between headlamps, feed 2.3 meter