HEADLIGHT AND TAIL LIGHT CONDENSATION

Due to the open splash-proof ventilation system, which is necessary to equalize the pressure of the headlight it comes within the headlamp to different climate zone and subsequently to the fogging of the lens that occurs during cool and warm areas in the headlight. The warming is effected by the heat emitted from the light source and the cooling of the lens by the airflow. Because of the maze-like air vents the heated and expanding air will be displaced from the headlight. Thereby humidity will be sucked into the headlight.

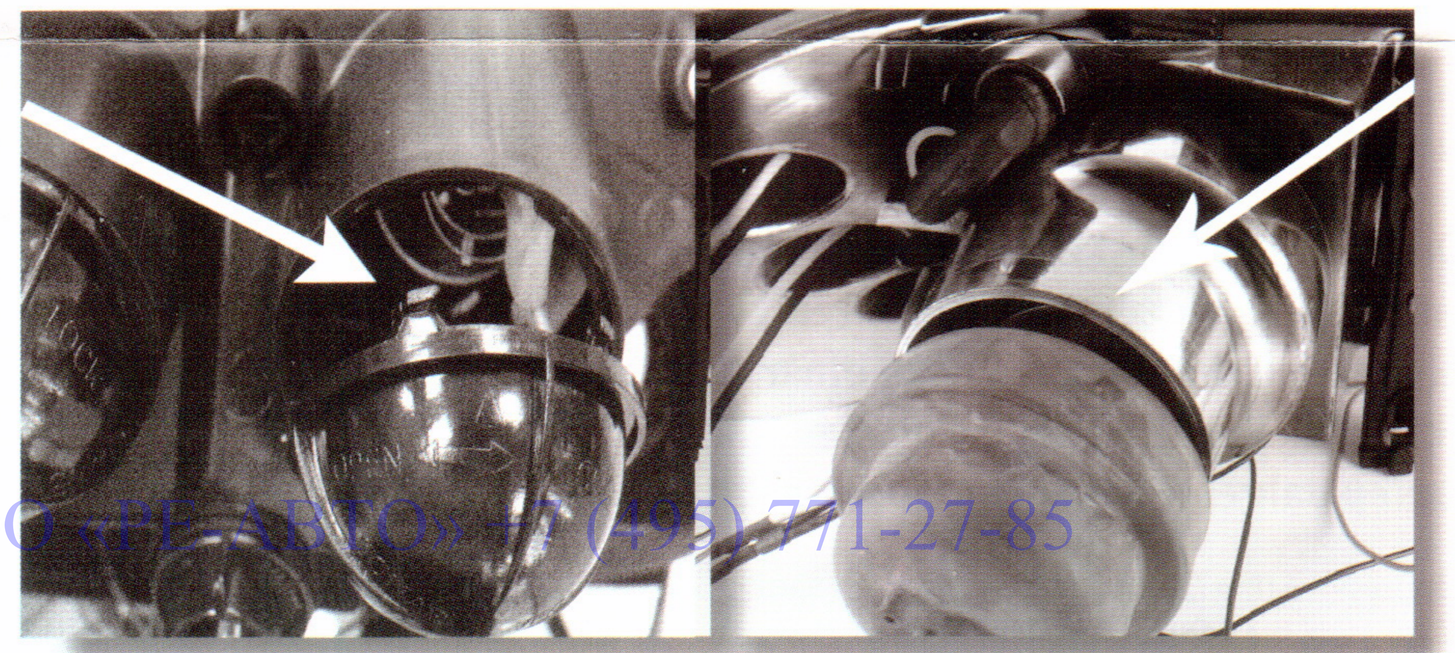
"Because of this fact a condensation on the inside of the lens may come if we have the contrast of humidity and high temperature from the inner housing and environment, specially in winter time or humid weather."

"Condensation can occur, for example, after driving through a car wash, steam cleaning the engine and the vehicle front, which changes in temperature overnight and similar situations."

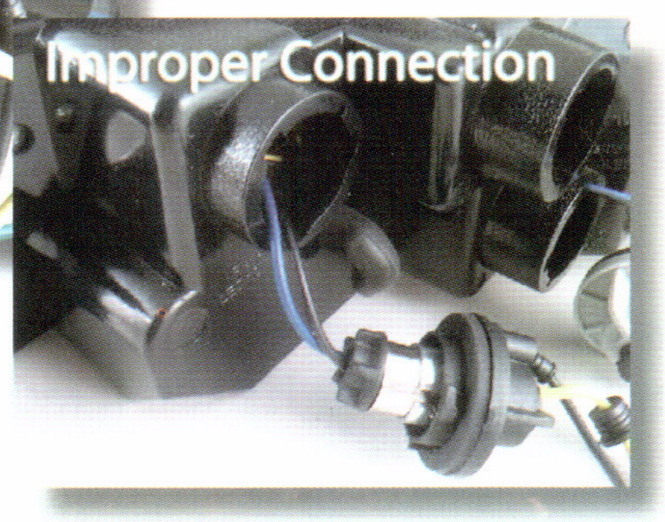
"Especially in the post heating, where the still hot engine heats the backside of the headlight and the same time the lens is cooled by the cold air outside you will have low moisture in the headlight on the lens"

"The process of misting is occurred physically and doesn't influence the optical headlight function in any way. The condensation also occurs no corrosion in the headlight"

"This condensation in significant part of the head-lights lens must disappear after around 20minutes with switched on low beam. Remaining surfaces of the lens can and may be misted after that."



To avoid condensation, make sure the rubber seal is on tightly. If not, moisture will build up.



"Condensation phenomenon can be found in any lights, also in those from competitors, because it is a physical reason. Therefore a replacement for the item is not admissible; it is not a technical defect in regard to the warranty."

Keine Gewährleistung aufgrund der

BETAUUNG VON SCHEINWERFERN

Aufgrund des offenen, aber spritzwassergeschützten Belüftungssystems, welches zum Druckausgleich erforderlich ist, kommt es innerhalb des Scheinwerfers zu unterschiedlichen „Klimazonen" und in der Folge zum Beschlagen der Streuscheibe. So treten in einem Scheinwerfer sehr warme, auf der anderen Seite relativ kühlere Stellen auf. Die Erwärmung erfolgt durch die von der Lichtquelle abgegebenen Wärme, die Abkühlung vor allem an der Streuscheibe durch den Fahrtwind. Durch die labyrinthförmig ausgelegten Belüftungsöffnungen wird die sich ausdehnende erwärmte, trockene Luft aus dem Scheinwerfergehäuse verdrängt. Nach dem Ausschalten der Lichtquelle kühlt die Luft im Scheinwerfer langsam ab. Dadurch wird mit Feuchtigkeit gesättigte Luft von außen in das Innere des Scheinwerfergehäuses gesaugt.

Due to the open, but splash-proof ventilation system, which is necessary to equalize the pressure, it comes within the headlamp to different „climate zones" and subsequently to the fogging of the lens. That occurs cool and warm areas in the headlight. The warming is effected by the heat emitted from the light source and the cooling of the lens by the airflow. Because of the maze-like air vents the heated and expanding air will be displaced from the headlight. Thereby humidity will be sucked into the headlight.

Durch diesen Umstand kann es bei hoher Luftfeuchtigkeit und hohen Temperaturdifferenzen zwischen Gehäuse innerem und der Umgebung zu einer Kondensation an der Streuscheibeninnenseite kommen, dies vor allem in der kalten Jahreszeit und bei feuchter Witterung.

Because of this fact a condensation on the inside of the lens may come if we have the contrast of humidity and high temperature from the inner housing and environment, specially in winter time or humid weather.

Eine Betauung kann zum Beispiel auftreten nach dem Durchfahren von Waschstraßen, Dampfstrahlen des Motors sowie der Fahrzeugfront, bei Temperaturänderungen über Nacht und ähnlichem.

Condensation can occur, for example, after driving through a car wash, steam cleaning the engine and the vehicle front, with changes in temperature overnight and similar situations.

Besonders in der „Nachheizphase", bei der durch den noch heißen Motor die Rückseite der Scheinwerfer aufgeheizt, gleichzeitig aber die Streuscheibe durch kalte Außenluft abgekühlt wird, schlägt sich bereits geringste Feuchtigkeit in der Luft im Scheinwerferinneren an der Streuscheibe nieder.

Especially in the „post-heating", where the still hot engine heats the backside of the headlight and the same time the lens is cooled by the cold air outside you will have a low moisture in the headlight on the lens.

Durch den Einsatz von Streuscheiben mit Klarglasoptik, die auch noch getönt sein können, ist dieses Phänomen erkennbarer als an Streuscheiben mit einer Struktur.

In lenses with clear glass, which can also be toned, is this phenomenon more visible than in lenses with a structure.

Bei einem Beschlag auf der Streuscheibe des Scheinwerfers muss die lichttechnisch wirksame Austrittsfläche an der Streuscheibe nach ca. 20 Minuten Fahrt mit eingeschaltetem Abblendlicht frei sein. Die restlichen Flächen der Streuscheibe können und dürfen danach noch betaut sein.

This condensation in a significant part of the headlights lens must disappear after around 20 minutes with switched on low beam. Remaining surfaces of the lens can nad may be misted after that.

Der Vorgang der Scheinwerferbetauung ist physikalisch bedingt und beeinflusst die optische Scheinwerferfunktion (Lichtleistung) in keiner Weise. Auch kann es durch die Betauung zu keiner Korrosion im Scheinwerfer kommen.

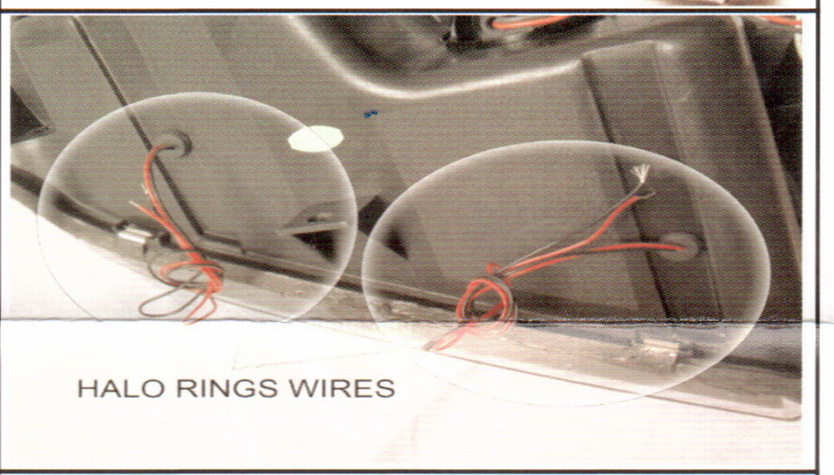
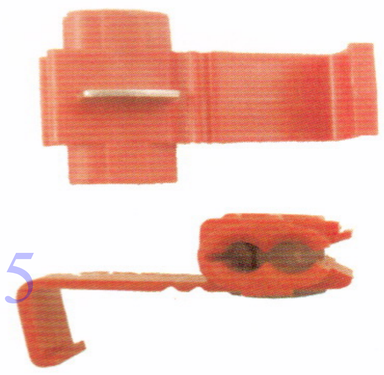
The process of misting is occured physically and doesn't influence the optical headlight function (light power) in any way. The condensation also occures no corrosion in the headlight.

! Das Phänomen der Betauung kann an jedem Scheinwerfer, auch denen der Mitbewerber, auftreten, da es physikalisch bedingt ist. Ein Tausch der Scheinwerfer ist somit nicht zulässig, da es sich nicht um einen technischen Mangel im Sinne der Gewährleistung handelt.

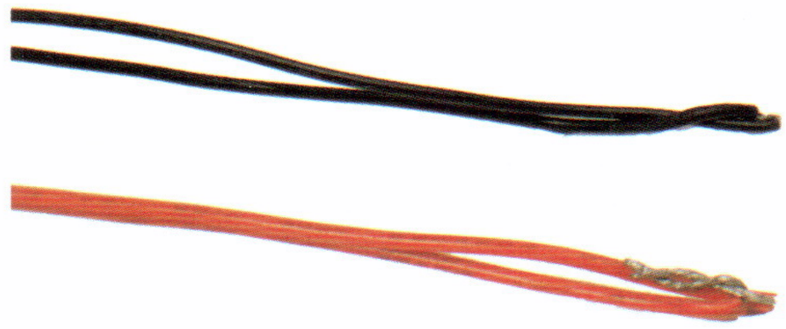
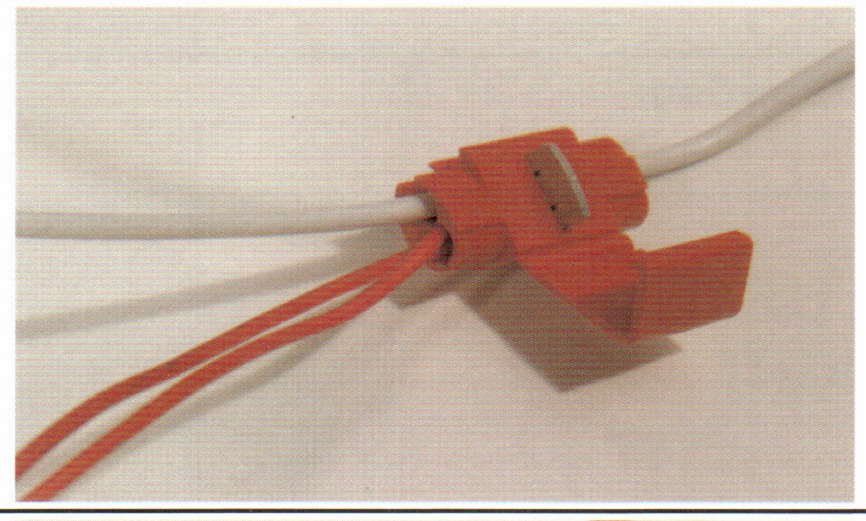
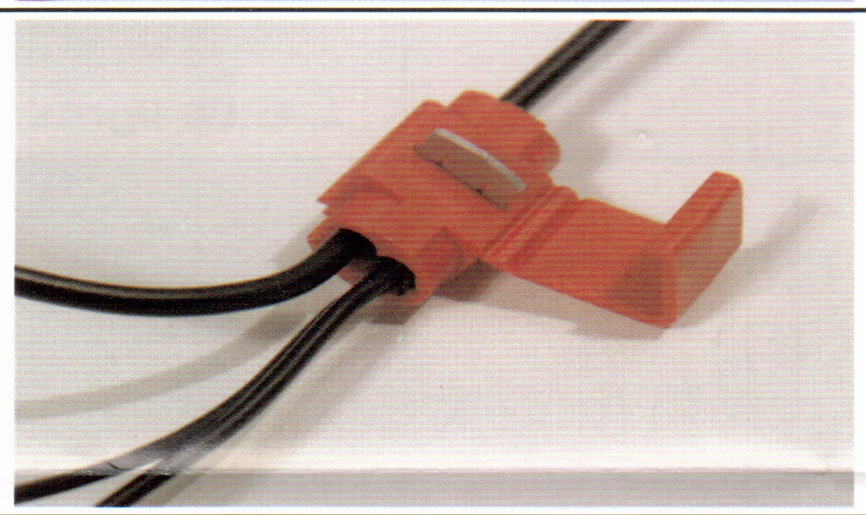
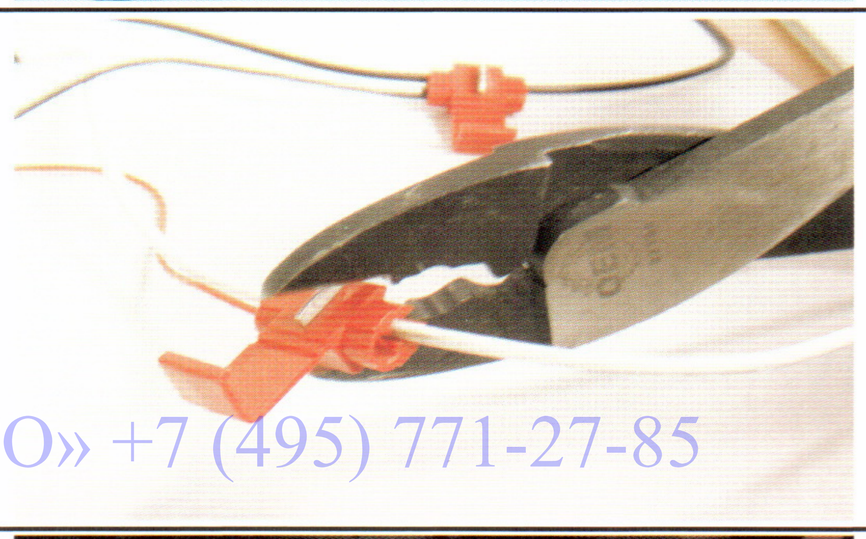
Condensation phenomenon can be found in any lights, also in those from competitors, because it is a physical reason. Therefore a replacement for the item is not admissible, it is not a technical defect in regard to the warranty.

INSTALLATION GUIDE:

HALO and L.E.D. Installation Guide

Parts Identification:		TOOLS REQUIRE	
HALO & L.E.D. HEAD LIGHT		CRIMPER	
HALO WIRES(FROM HEADLIGHT) RED(POSITIVE) BLACK (NEGATIVE)		VOLT METER	
L.E.D. WIRES. -POSITIVE(WHITE) -NEGATIVE(BLACK)		4-5QTY QUICK CONNECT	
		BLACK TAPE	

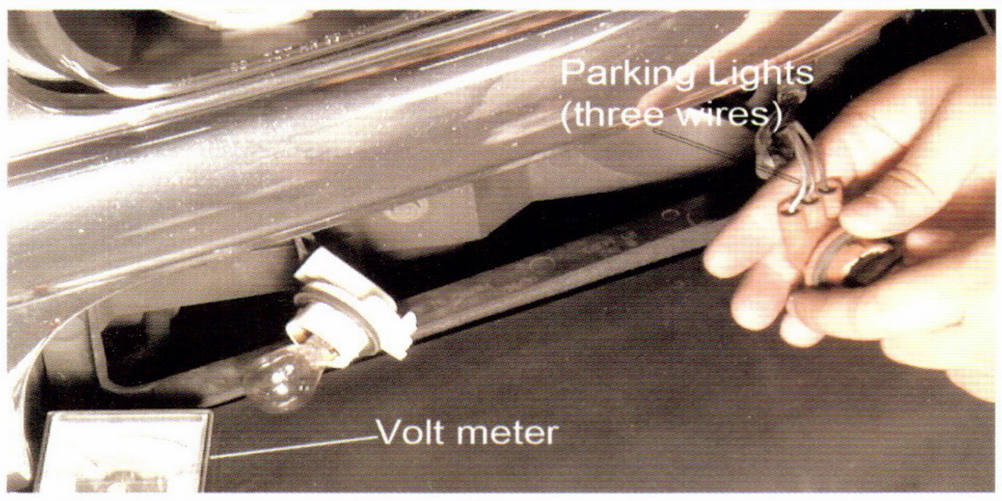
STEP:2 PRE-WIRING

There is two red(positive) and two black(negative) wires coming from the HALO Rings. Pair the color together by source.	
Connect the HALO wires to the L.E.D. wires using a quick connect. Red and White wires are Positive. Black is Negative.	
Negative connection.	
Use the Crimper to close the quick connects together. Check the wiring after connecting, make sure it is connected properly.	
Check all connections before installing the headlights onto the vehicle. Connect the Positive and Negative wires to the battery terminal to see if all HALO and L.E.D.'s are lid up.	

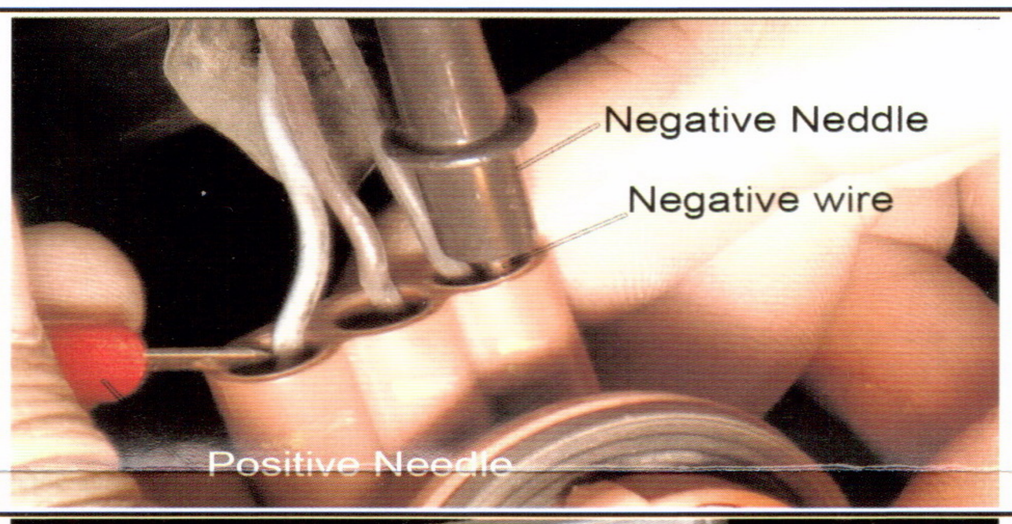
STEP: 3 Connecting to Parking/Running Lights

Most users connect the HALO/L.E.D.'s on the parking/ running lights. This instruction, we're gonna connect to the Parking/Running lights.
First, locate the parking lights on your vehicle Head-light housing. Some Parking lights come with two(running lights, ground) or three(running lights,turn signal,ground) wires.

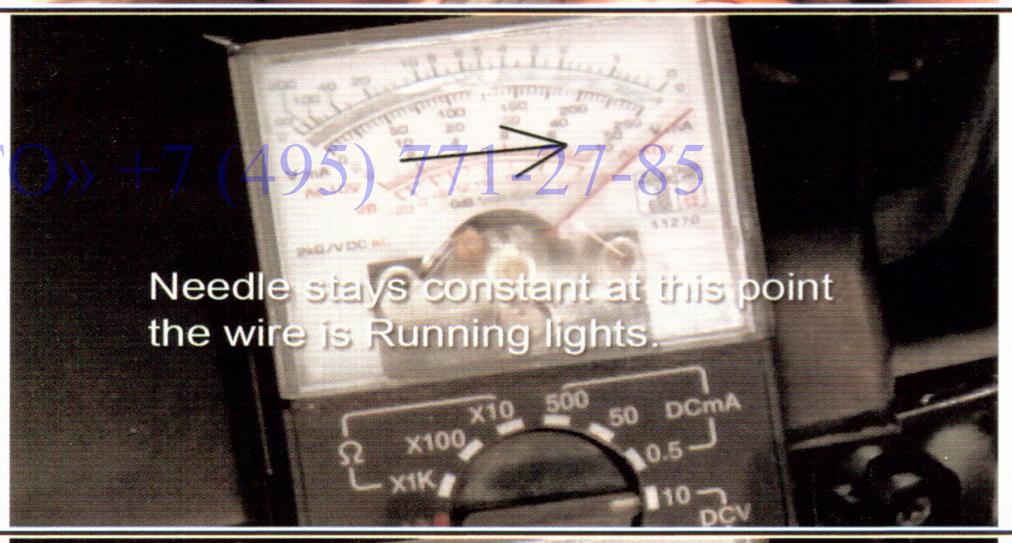
To determine which wires are what on the Parking lights, we use a volt meter.



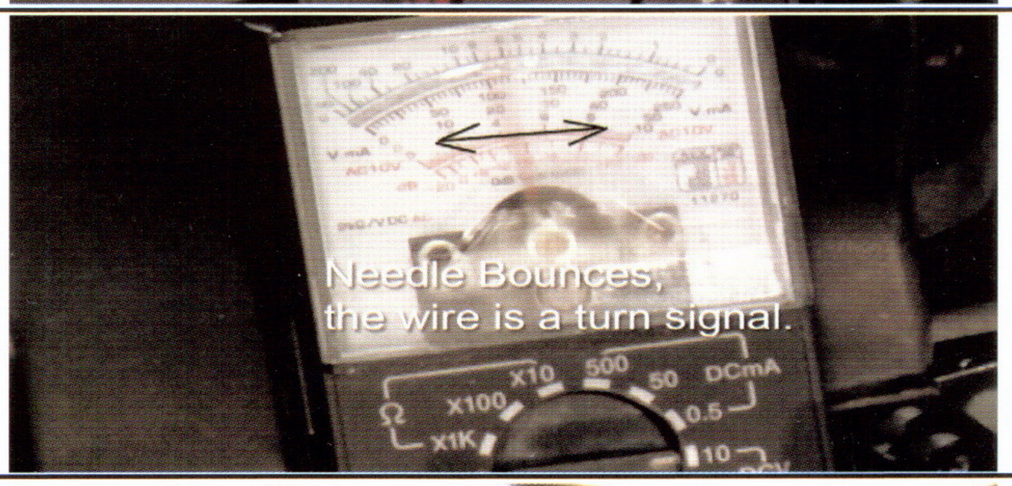
The volt meter has a positive(red) and negative(black) needles. First turn on the parking light and signal on. Then Pinch the Negative needle to a ground or negative wire(as shown). Then Pinch the Positive wire to one of the color wires on the turn signal.



To understand how to read the volt meter in simple term; When the needle stays constant on high voltage, the wire that was pinch is a Running/Parking light. Meaning the parking light on your vehicle stays on whenever the lights are turned on.

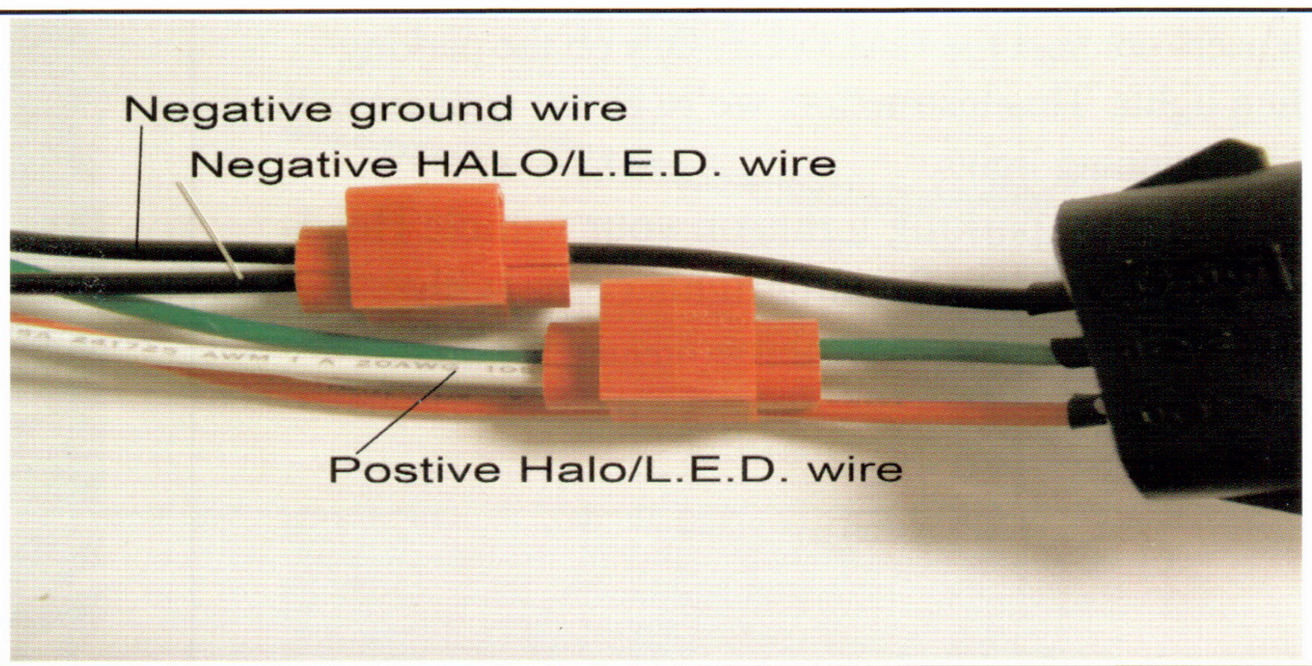


If the needle bounces on the meter, the wire is a turn signal. The voltage to the turn signal pull high and low in order for the turn signal to blink.
We don't recommend to



Once you locate the running wires, use the quick connects and connect the HALO/L.E.D. Positive wires to the running lights.

STEP:4 FINISHING

Use the quick connect and connect the HALO/L.E.D. Negative wires to the negatie wires on the Parking Lights.	
Before putting the headlight back on, check the HALO/L.E.D.'s make sure they all lid up.	
You've just installed HALO/ L.E.D.'s on your vehicle.