

# WAR DEPARTMENT SPECIFICATIONS TELL WHAT LIGHTS TO USE; HOW AND WHEN TO USE THEM

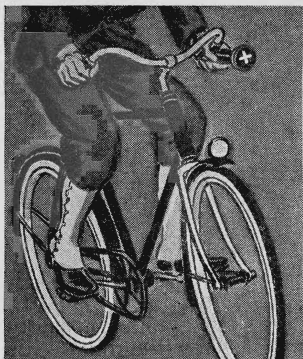
drawn by its own artist from information that has been released.

You probably won't be able to buy the lamps for some time, since the output of several manufacturers is going to the Government. Until then, there are no other officially approved blackout driving lights. Co-operating in drawing up the specifications were the Army Engineer Board, the National Technological Civil Protection Committee, the National Defense Research Council, the U. S. Bureau of Standards, the Interstate Commerce Commission, the Office of Defense Transportation, and the War Production Board.

The main driving light has a hood projecting out over its large black mask. A lens fitted under the hood forms a horizontal light slot, flat on the bottom but with several short vertically extending slots along its upper edge. The hood permits from 25 to 50 candlepower to be projected on the road, but cuts this value to .005 candlepower one degree above the horizontal—virtually invisible from a few yards away. A pair of standard sealed-beam headlights throw 50,000 candlepower on the road.

It is for use on all motor-driven vehicles, including streetcars, busses, trolley-busses, and motorcycles. On all but the last it is mounted between the left side and center. Motorcycles carry it center-mounted. It must be far enough forward to eliminate objectionable reflection from the vehicle itself, as near as possible to the normal line of the operator's vision, and between 36 and 55 inches above the road in a normally loaded vehicle, but no higher than the top of the steering wheel.

Mounting calls for critical adjustment so that the slot is level and the beam projects straight forward.

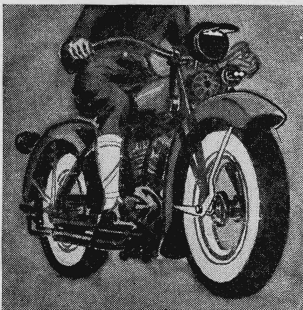


**BICYCLE.** Amber reflector at front; red, rear. Whiten lower parts. Blackout flash is urged

The visual cutoff of the top of the beam on a vertical screen 10 feet in front of the lens must be between two and three inches below the bottom of the slot.

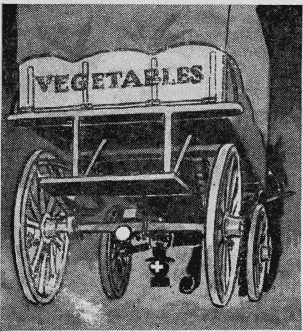
The clearance lamps—a pair to each motor vehicle except motorcycles, which have one—show white for emergency vehicles only, amber for all others. Smaller than the driving light, they are securely mounted as near to the sides of the front of the vehicles and as close to the headlight level as possible, without interfering with the function of the headlight. Aimed straight ahead with the face of the lens vertical and the slot horizontal, the lamps shine with the driving light to show the width of a vehicle. Motorcycles use just one clearance lamp at the front center.

Casting no usable light on the pavement, the clearance light has a rectangular hood with a lens over the front end and a light-absorbing inner surface. The hood, about an inch long, carries a light mark at its back consisting of two more-or-less triangular lenses with the apex of each triangle pointed down. Thus they appear brightest from straight ahead, the brightness diminishing to zero as the viewing angle rises. They can be seen from about 1,000 feet dead ahead.



**MOTORCYCLE.** Driving and one clearance lamp front; tail-stop rear. Dull all shiny areas

**ANIMALS.** Use blackout flash or lantern to reveal them. Reflectorize wagons same as bikes



The approved combination tail and stop light is to be mounted close to the left rear of the vehicle. Its red tail-light lens goes at the bottom, its amber stop-light lens at top. The light openings are recessed in the housing. Recessing gives the same effect as a rectangular hood.

The masked opening of the tail-light unit takes the approximate shape of four V's lined up beside each other, with a wide space between the two center ones giving the appearance of two separated pairs of V's to the lineup. From some