

WIRING AND MAINTENANCE INSTRUCTIONS FOR

JETSONIC™ MODELS JS1 , JS3 , JS7 , JS8 , and JC1

I. ELECTRICAL WIRING.

The Light Assembly is completely wired at the factory and does not require any additional internal wiring. The cable connected to the Light Assembly contains all the conductors necessary for control of any and all basic and optional functions. The wiring diagrams, contained in this sheet, illustrate the function of each conductor in the cable. Locate the wiring diagram for your particular model and wire accordingly. Be sure to use fuses and switches with adequate current capacity (current ratings shown in wiring diagrams). CAUTION: Metal, including the inside of the floorboard, near the catalytic converter becomes extremely hot during vehicle operation. Never route the Light Assembly cable through any of these areas near the converter.

NOTE

When selecting a switch for front cut-off, a lighted switch is recommended to indicate front lights are not operating.

II. MAINTENANCE.

WARNING

High voltages are present inside the Light Assembly when the strobe light option is installed. Wait at least ten (10) minutes, after shutting off power, before servicing this unit.

A. Cleaning the Plastic Domes.

Ordinary cleaning of the plastic domes can be accomplished by using mild soap and a soft rag. Should fine scratches or a haze appear on the domes, they can ordinarily be removed with Federal Dome and Chrome Cleaner (Federal Part No. 8287B349A). CAUTION: The use of other materials such as strong detergents, solvents, petroleum products, etc. can cause crazing (cracking) of the plastic domes.

B. Lamp Replacement.

CAUTION

Always allow lamps to cool before removing.

1. Replace 50-watt halogen lamps with Federal part number 8107A119 and 35-watt with 3548A028.

2. Replace strobe lamps with Federal part number 8107A127.

3. When replacing rotating lamps, insure that the filament in the new lamp is in the vertical position.

4. When replacing alley lights, takedown lights and flashing front and rear lamps on JC models; insure that the filament in the new lamp(s) is in the horizontal position.

C. Lubrication.

At least once a year, lubricate the lamp shaft bearings with a drop of SAE10 oil and apply a film of light grease to the worm.

D. Cleaning Reflectors and Mirrors.

Use a soft tissue to clean the reflector and mirrors. Avoid heavy pressure and the use of caustic or petroleum base solvents which will scratch or dull the surface.

III. ADJUSTMENTS.

A. Alley Lights.

The alley lights may be adjusted up to 7° toward the front or rear. To adjust, loosen the center screw and rotate the reflector and socket assembly to the required angle. Tighten screw after completing adjustment.

B. Flashing Lights.

In the flashing light mode, each reflector assembly should be aimed at the center of its end mirror. This adjustment has been made at the factory and will ordinarily require no additional adjustment. However, should an adjustment be necessary, the reflector assembly may be re-

aimed by performing the following procedure:

1. Operate unit in the flashing mode, to set the reflector assemblies in the initial aiming position.

2. Turn-off power. Visually check each reflector, in relation to its end mirror, to determine if adjustment is necessary.

3. If the adjustment required is 10° or less, proceed as follows:

a. Loosen the two screws which secure the reflector assembly to the gear (see figure 1).

b. Rotate the reflector assembly to the proper position and re-tighten the screws.

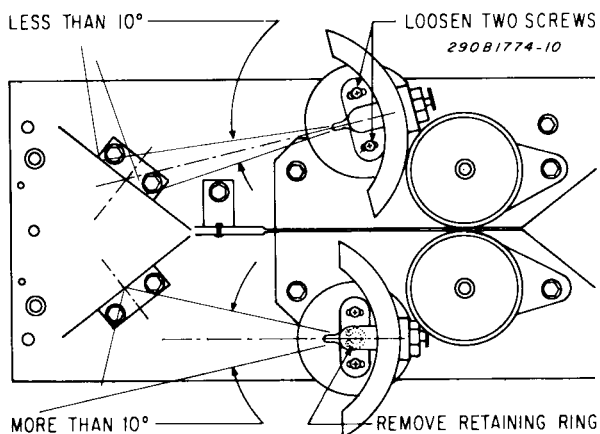


FIGURE 1

4. If the adjustment required is more than 10° , proceed as follows:

a. Remove the retaining ring (see figure 1). Lift the gear and reflector assembly to disengage the gear teeth.

b. Rotate the assembly to the correct aiming position. Engage the gear teeth and re-install the retaining ring.

c. To complete the adjustment, repeat step 3.

IV. SERVICE.

A. General.

The information in this section will aid the user in servicing the equipment. Should problems arise that cannot be handled satisfactorily or promptly locally, consult the factory for technical assistance or equipment servicing.

Communications and shipment should be addressed to:

Service Department
Federal Signal Corporation
2645 Federal Signal Drive
University Park, IL 60466

If you intend to return a component (strobe power supply, flasher board, etc.) for repair, first notify the factory by letter or phone. Advance notice must be given before shipment. Such notice should clearly indicate the service requested. A prompt reply will be provided.

B. Strobe Power Supply Replacement.

WARNING

High voltages are present inside the Light Assembly. Wait at least ten (10) minutes, after shutting off power, before servicing this unit.

The strobe light power supply does not contain any user serviceable parts. Should a breakdown in the power supply occur, it should be returned to Federal for repair and replaced. To remove the power supply, proceed as follows (see figure 2):

1. Remove the mirror assembly by removing the one (1) #10 screw securing the reflector bracket and the four (4) #6 screws which secure the reflectors to the power supply.

2. Unplug the connector from the power supply.

3. Remove the two #10 screws which secure the power supply.

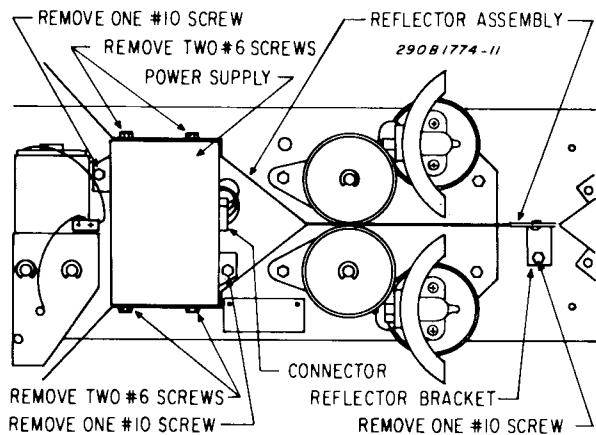


FIGURE 2

4. Install the new power supply by performing the previous steps in reverse order.

C. Flasher Board Replacement.

To remove the flasher board, merely disconnect all flasher leads and remove the three (3) #6 screws which secure the board to the bracket.

D. Speaker Driver and Cone Replacement.

To replace the speaker driver and cone, proceed as follows (see figure 3):

1. Remove the grille and rear cover from the speaker housing.
2. Unscrew the cone, being careful not to lose the five (5) washers.
3. Unscrew the wirenuts which connect the driver lead wires to the light assembly feed wires.

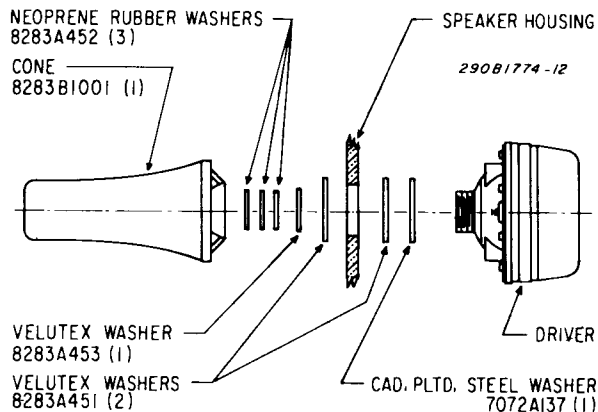


FIGURE 3

4. Remove the two (each) 1/4-20 screws, washers and lockwashers which secure the driver to the housing.

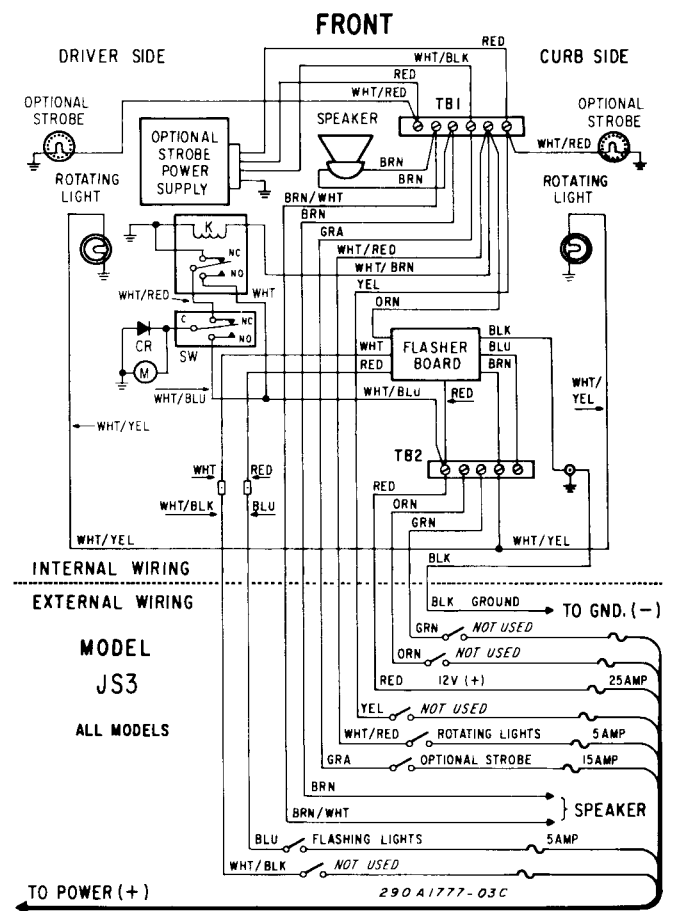
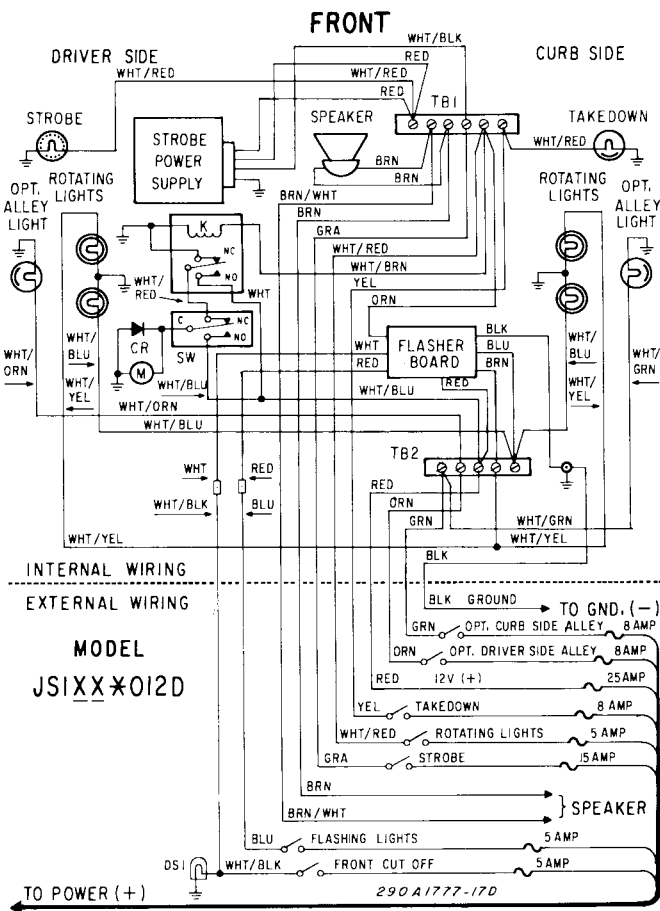
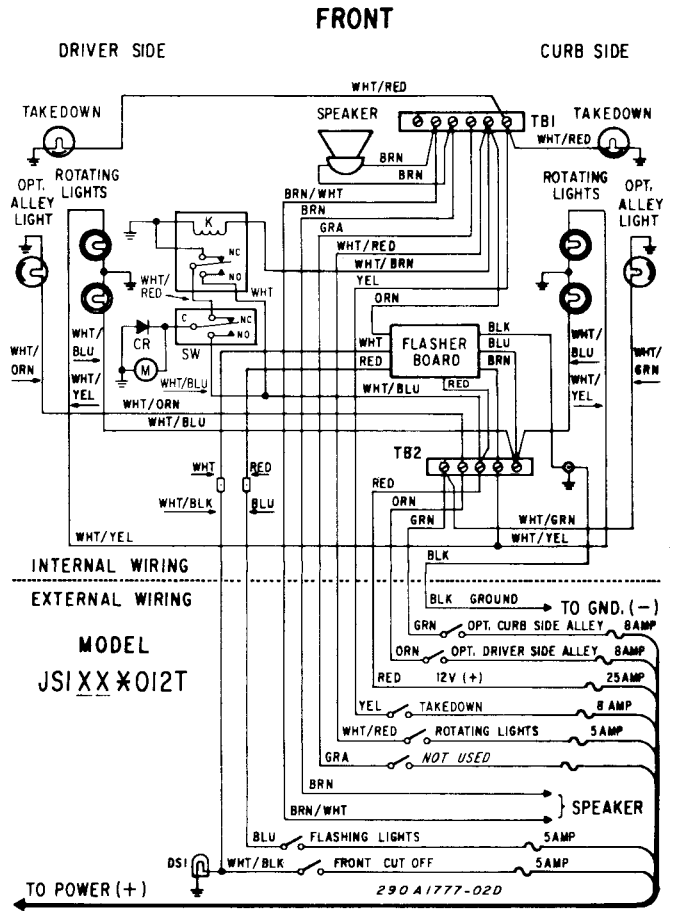
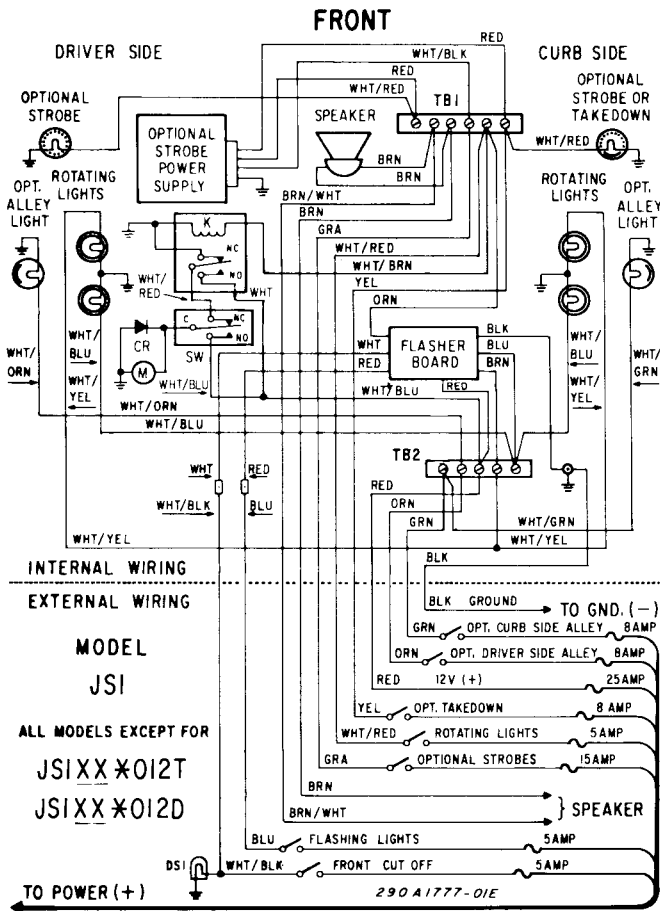
5. Remove the driver, being careful not to lose the two (2) washers.

6. Remove the leads from the old driver and connect to the new driver. 58-watt driver must be unsoldered and then re-soldered.

7. Reinstall the driver. Insure that washers are installed correctly (see figure 3). Re-connect the driver lead wires to the light assembly feed wires. Secure connections with wirenuts.

8. Reinstall cone. Insure that washers are installed correctly (see figure 3).

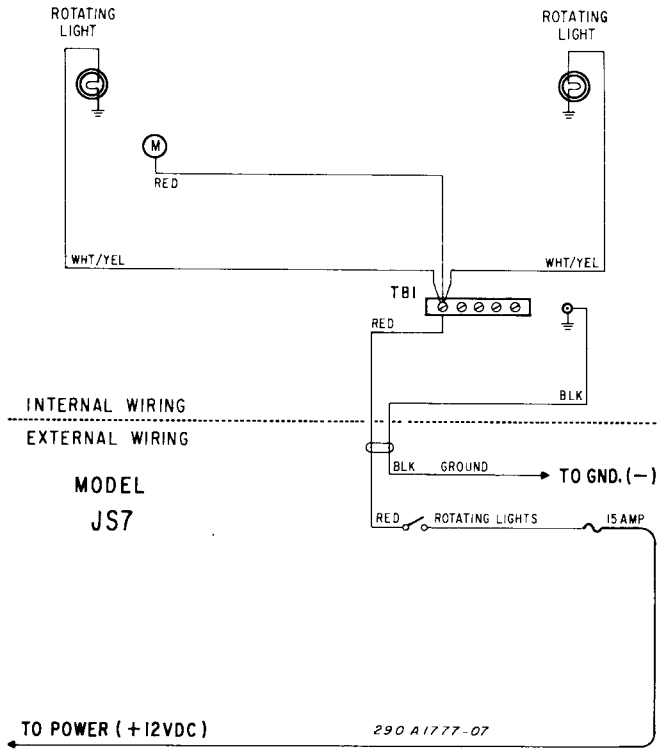
9. Replace grille and rear cover, (removed in step 1).



FRONT

DRIVER SIDE

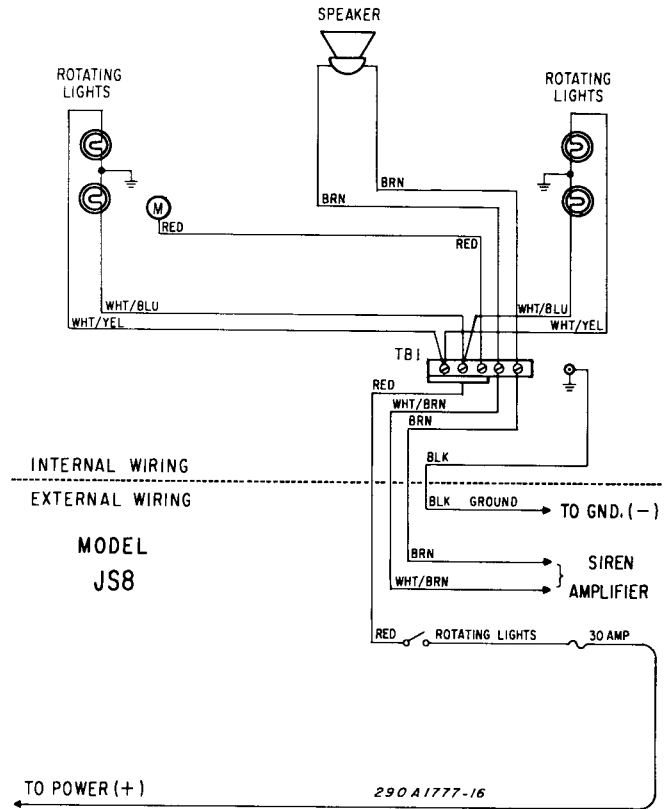
CURB SIDE



FRONT

DRIVER SIDE

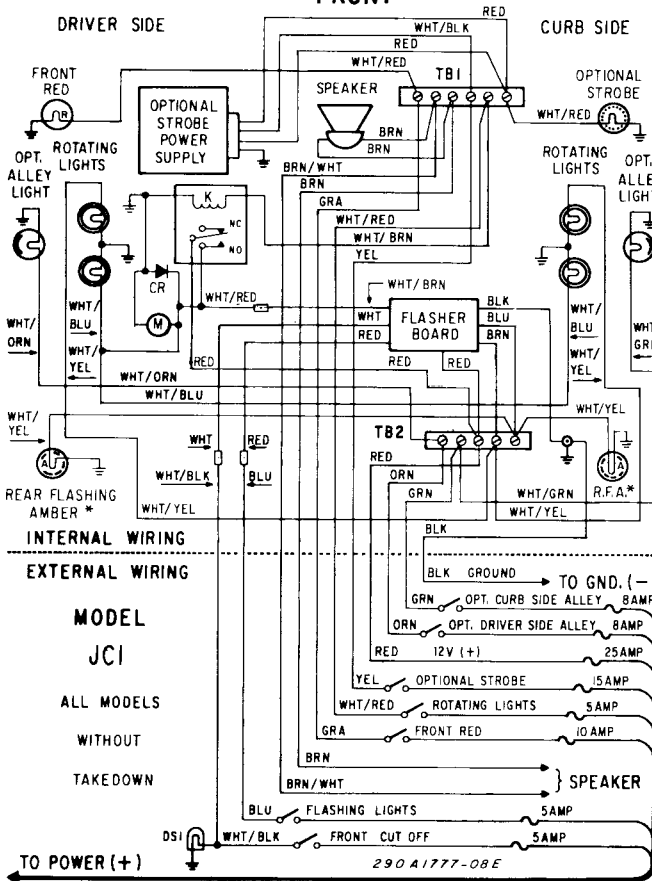
CURB SIDE



FRONT

DRIVER SIDE

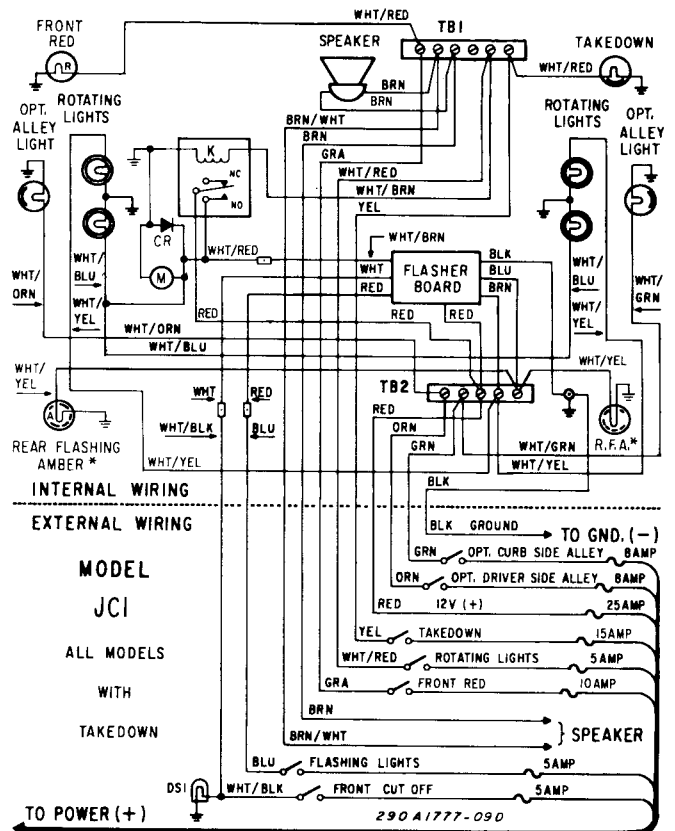
CURB SIDE



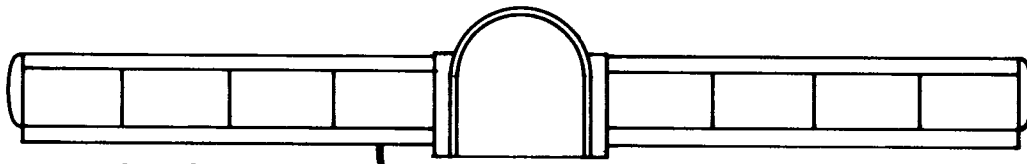
FRONT

DRIVER SIDE

CURB SIDE



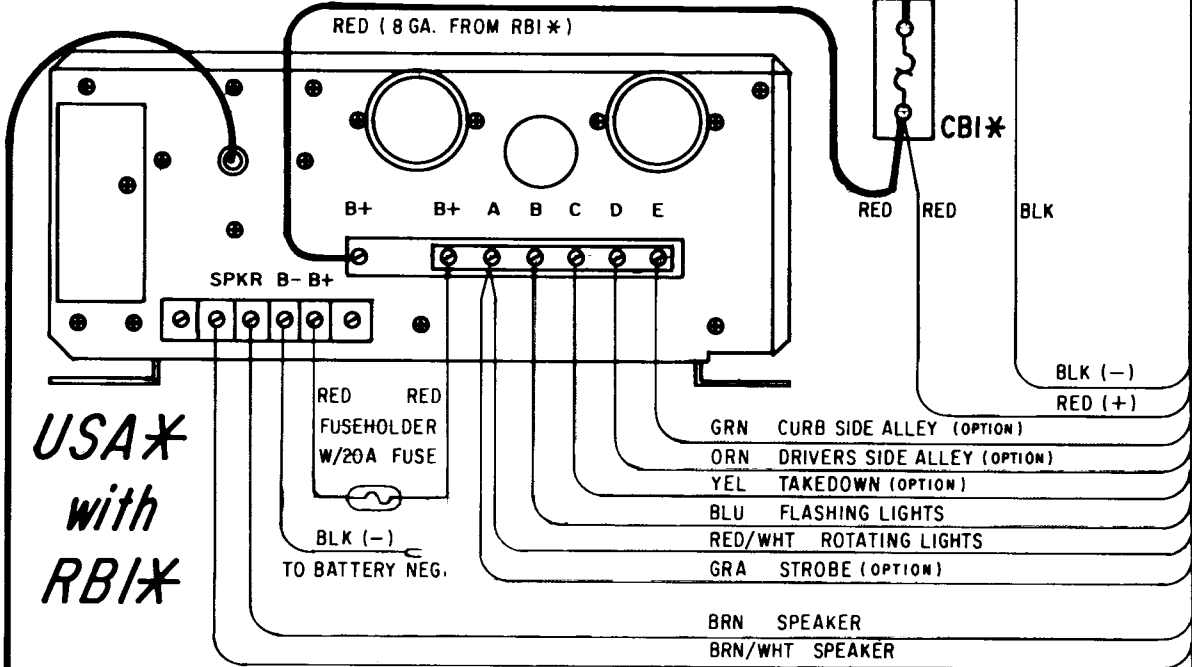
JSI with USA*, TCC3*, ASM*, and RBI*



JetSonic

BLK TO BATTERY NEG. (-)

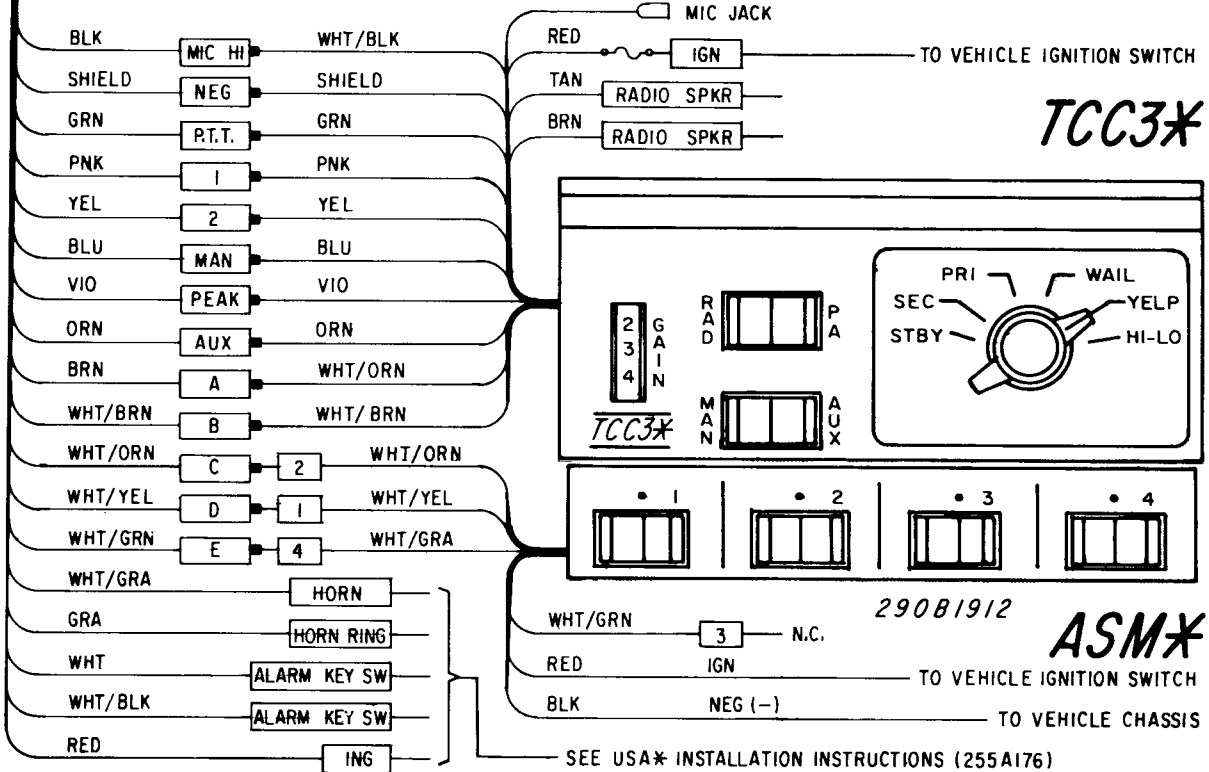
RED TO BATTERY POS. (+) WIRE MUST BE 8 GA. OR HEAVIER



USA
with
RBI**

REQUIRES ADDITIONAL LIGHTED SWITCH, OR CONNECT TO "C" TERMINAL IF DESIRED. WHT/BLK FRONT CUTOFF

← CONTROL CABLE ASSEMBLY, USA* (146C555)



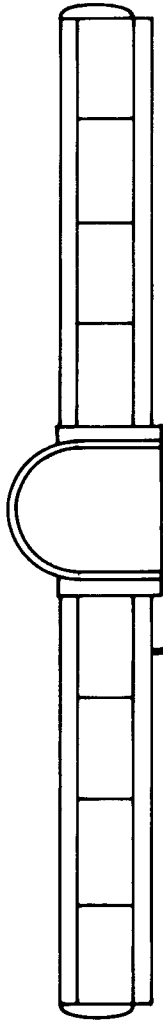
*TCC3**

*ASM**

SEE USA* INSTALLATION INSTRUCTIONS (255A176)

TO BATTERY NEG.

TO BATTERY
POS. WIRE
MUST BE 8GA.
MINIMUM.
CBI*



JSI with PA2100B

JetSonic

BLK

(INTERNAL TO PA2100*012) SETTING FOR SW501

SW501	ONE			TWO			THREE		
	1	2	3	1	2	3	1	2	3
OPEN	0	0	0				/	/	/
CLOSED	X						X	X	/

