

STEP #1 READ THESE INSTRUCTIONS before starting this installation.

To aid you we have used **BOLD PRINT** to note **IMPORTANT** items and provided general diagrams for **FORD**, **GM** and **MOPAR**. There is also a **DO'S** and **DON'TS** section that you may find useful. Please remember that these are **GENERAL INSTRUCTIONS** for your **UNIQUE** and **SPECIFIC** vehicle and you may need to **MODIFY** them for your application. Also whenever using **AFTER-MARKET** or **SPECIALITY** equipment, always use the diagrams **PROVIDED WITH** that equipment.

This **WORKBOOK** is designed for both our labeled and color-coded harnesses. Whenever a specific wire is referred to, it will be displayed with its **LABEL** then it's **COLOR**. You are to use the destination that applies to the kit you purchased. If a diagram shows **ONLY** a color **OR** a label then that wire is **NOT PROVIDED** by this kit. An example of this would be **GROUND WIRES** which we **DO NOT** provide. We do recommend the use of black for ground wires on our color-coded harness.

Remember this is a **WORKBOOK!!!** So make use of the blank space we provide for your notes. Write things down so you won't forget.

STEP #2 COMPLETE THE WORK SHEET at the back of this workbook. This should be done while looking at the vehicle; so that you can identify what accessories you will be using and what switches will be necessary. Here is where **A LITTLE PLANNING WILL SAVE A LOT OF TIME.**

The **WORK SHEET** has been divided into the same 4 basic sections that make-up your harness. They are the **FRONT SECTION**, **DASH SECTION**, **STEERING COLUMN SECTION** and **TAIL SECTION**.

For each section compare the list of wires to your application and note if it will be **USED**, **MOVED** or **REMOVED**. Before marking wires to be removed consider accessories you may want to add at a later time or those not provided for by this kit. The design of your vehicle may require some of the wires to be moved from one section to another. (An example of this would be, if the horn was mounted on the rear of the car, you would want to move the **HORN = GREEN** wire to the tail section.) When marking a wire to be moved **DON'T FORGET** to **WRITE IT** into the new section in the extra spaces provided. The extra spaces should also be used for any extra wires you may need to add, such as ground wires.

STEP #3. PREPARE THE HARNESS FOR INSTALLATION.

For this you will need a **LARGE CLEAR WORK AREA** to spread out the harness. (The floor next to the project car works well.) Your harness, as purchased, will have each of the **4 SECTIONS** coiled and tied with cable ties. When working with the harness, it is **VERY IMPORTANT NOT TO REMOVE THE 3 CABLE TIES CLOSEST TO THE FUSE PANEL.**

Start with the largest coil of wires. That will be the **FRONT SECTION**, so remove the cable ties and uncoil the wires toward the front of the vehicle. The next largest coil of wires will be the **TAIL SECTION**. Cut off the cable ties and uncoil those wires toward the rear of the vehicle. The remaining coils of wires are the **DASH SECTION** and the **STEERING COLUMN SECTION**. The **STEERING COLUMN SECTION** is the one with the pre-attached plugs and will not need to be changed in most applications. Remove the cable ties from the **DASH SECTION** and uncoil those wires to the side of the **FUSE PANEL**.

Now using the **WORK SHEET** that you completed in **STEP #2**, start by removing any unused wires. Work one section at a time and remove those wires **ONE WIRE AT A TIME** by pulling them through the remaining harness cable ties. (**REMEMBER DO NOT REMOVE THE 3 TIES NEAREST THE FUSE PANEL.**) Unused wires that come directly from the **FUSE PANEL** are **HOT LEADS** and should be cut as **CLOSE** to the back of the panel as possible. Use **CAUTION** and only cut wires that you are sure you will **NEVER NEED!!**

After removing all unused wires from all sections, move on to those wires that you noted you would have to move from one section to another. Working one wire at a time move those wires to their new sections by pulling them out of their original section and passing them through the harness ties into their new sections.

Now, a section at a time, add any wires you noted you would need that are **NOT PROVIDED** in your kit. (Note--you can use the wire you removed, but **KEEP NOTES** so as not to get **CONFUSED**.)

The last part of this step is to compare the **WORK SHEET** to the harness as you have it now prepared. If everything is accounted for, use cable ties and recoil the sections one at a time. If the ties nearest the panel are loose either tighten them or replace them as necessary.

STEP #4 MOUNTING THE FUSE PANEL The FUSE PANEL of our standard harness is designed to be mounted under the dash on the driver's side of the vehicle.

The FUSE PANEL should be mounted securely to a **FLAT SURFACE**. Care should be taken to keep it and the wires away from **MOVING OBJECTS** such as gas and brake controls and the panel **SHOULD BE ACCESSIBLE** in case you ever blow a fuse. When selecting the panel location make sure that the **STEERING COLUMN SECTION WILL REACH YOUR COLUMN**.

After selecting the location for the **FUSE PANEL**, determine the best place to mount the horn relay that's pre-wired to the panel. We have provided ample length so that you may mount the relay anywhere near the panel.

Now that the **FUSE PANEL** and **HORN RELAY** are mounted, note where the **FRONT SECTION** wires exit the panel. Find a spot on the fire wall where these wires can enter the **ENGINE COMPARTMENT** without interfering with other components, such as brake boosters, wipers, the engine, steering gear and etc. At that spot drill a 1 1/4" **HOLE** and install the grommet provided in your kit.

As the last part of this step, remove the cable ties you put on the **FRONT SECTION** wires and pass them through the grommet into the engine compartment **ONE WIRE AT A TIME**.

STEP #5 ROUTING AND ATTACHING THE WIRES. In this step you will be completing the job by terminating all those loose ends. As before this will be done section by section. We suggest you start with the **TAIL SECTION** and end with the **DASH SECTION**. Each section has its own set of instructions and we suggest you review the **DO'S** and **DON'TS** page and your **WORK SHEET** before starting each section. As you complete each section use cable ties to group the wires together and at points where wires branch off from the harness.

The **TAIL SECTION** harness is designed to be routed to the back of the vehicle inside along the floor. The wires can be taped to the floor or run under the driver's side door sills. They need to be routed where they **WON'T BE WALKED ON** and where the seats won't interfere. At the rear of the vehicle you will attach the wires to your lights, gas tank sender, and fuel pump as indicated on the **TAIL SECTION DIAGRAM**. Please note also that the **DOME LIGHT** power wire is included in the **TAIL SECTION**.

The **FRONT SECTION** wires include the front lighting, engine and accessories normally mounted on the front of the vehicle. For this section start by separating the **ENGINE** wires from the rest. When installing the front lighting and accessory wires follow the **FRONT LIGHTING DIAGRAM**. When installing the **ENGINE WIRING** use the diagram from the **FORD, GM** or **MOPAR** section that comes closest to your vehicle. Remember when connecting the 10 ga. **SOLENOID PWR = RED** wire to use the **FUSIBLE LINK** provided in your kit. Failure to install the **FUSIBLE LINK** **VOIDS ANY AND ALL WARRANTY** on this harness system. If you are using an **AMP METER** please follow the **AMP METER** section on the **DASH DIAGRAM**.

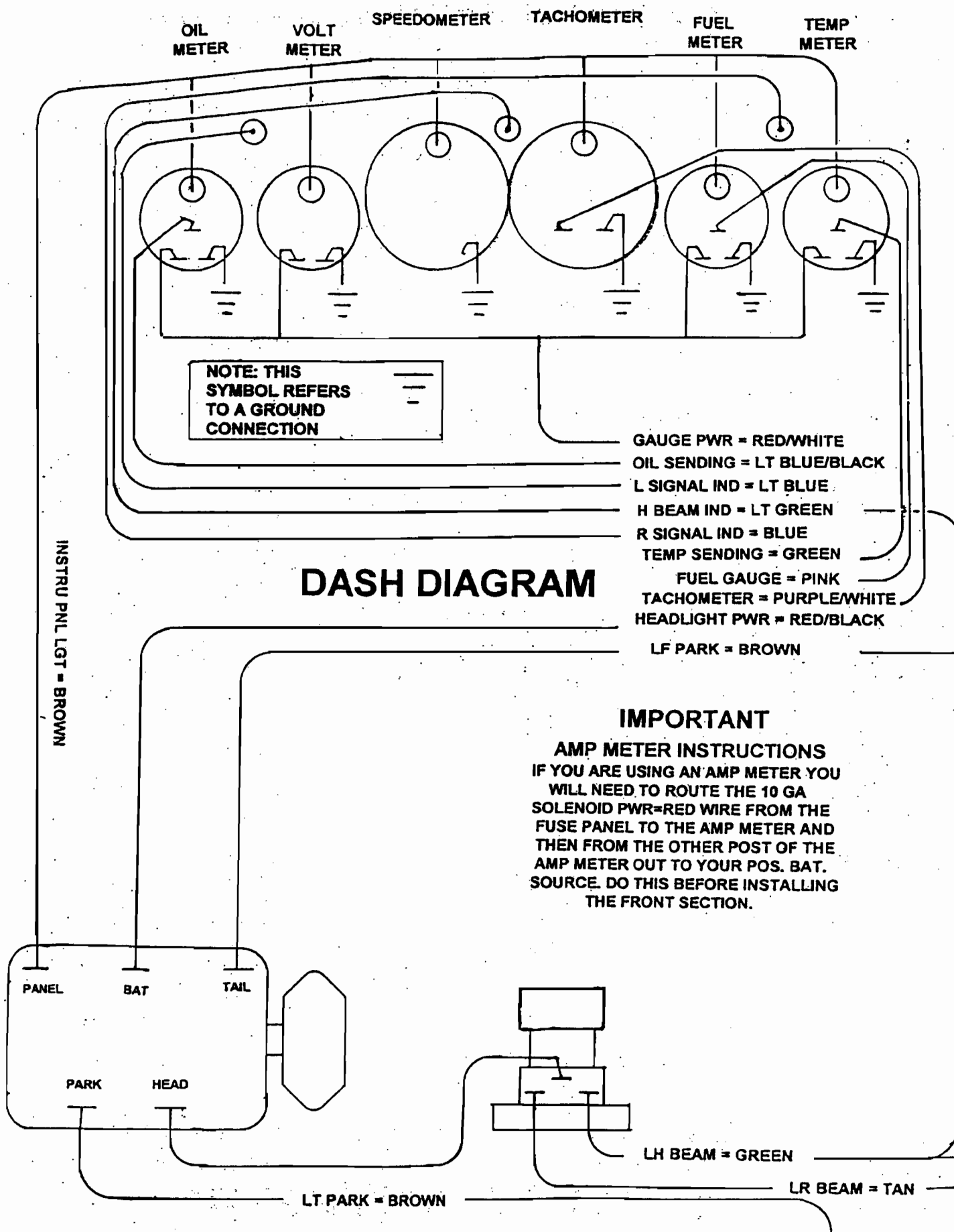
The **STEERING COLUMN SECTION** has the wires for your turn signals, ignition switch and dimmer switch. The plugs on these wires are for a **GM STEERING COLUMN** that has a column mounted ignition switch. If you are using that type of column, plug the black and clear plugs into the ignition switch. The dimmer switch plug will fit a floor mounted dimmer or the GM column mounted dimmer. The turn signal wires are pre-terminated and you will be using the diagram in the **GM SECTION** to determine the correct plug and order that the wires should be installed. Note that the plugs are letter coded to help.

If you are using a **LATE MODEL GM VAN** type column the turn signals will match the plugs in your kit but you will have to use **IGNITION SWITCH DIAGRAM** in the **DASH DIAGRAM**.

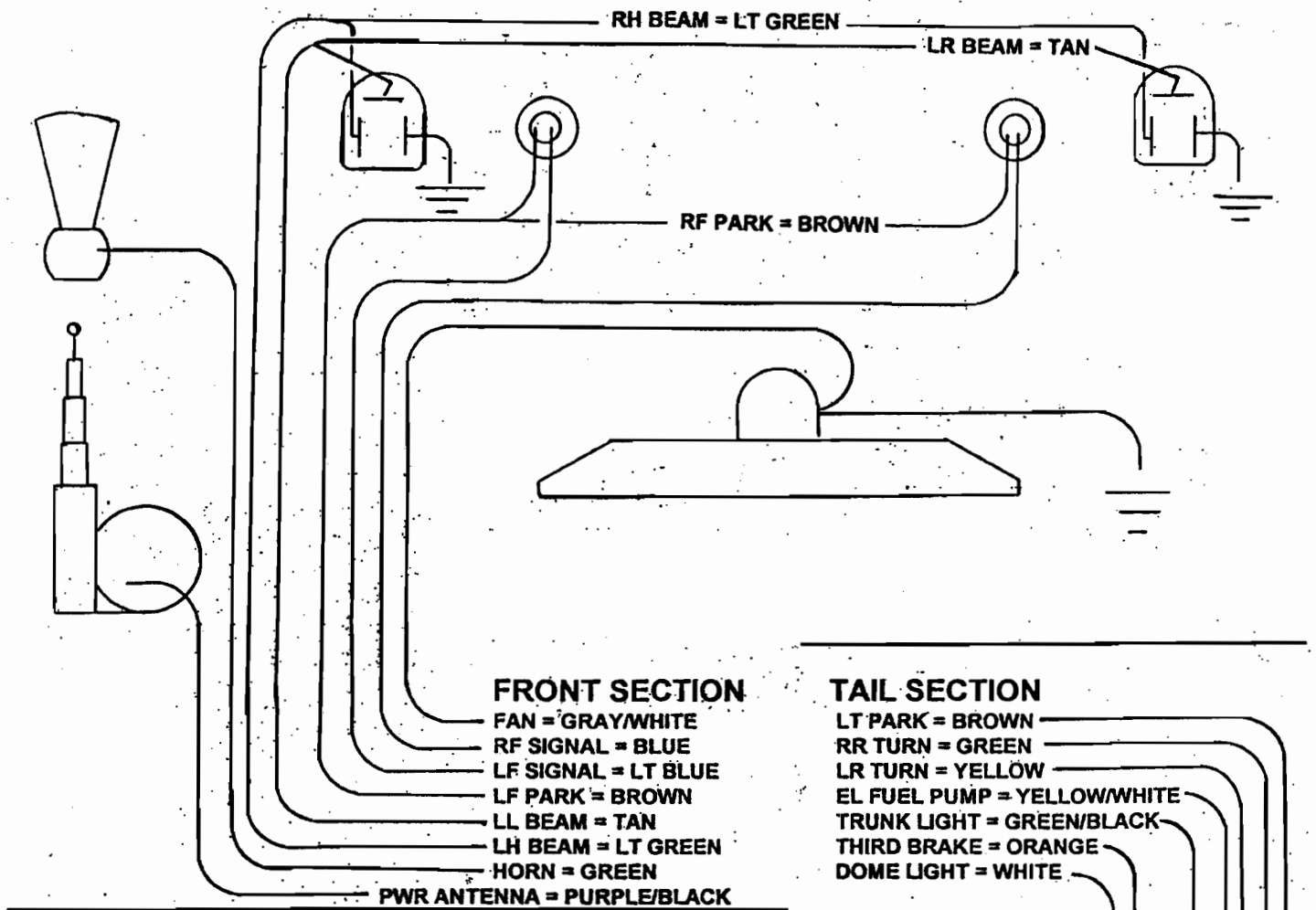
If you are using a **FORD** or **MOPAR COLUMN** use the diagrams in the **FORD** and **MOPAR SECTIONS**. But **REMEMBER** because they change colors often, these interchanges may **NOT** match your column. If the colors don't match or you're using something not listed, you may have to sort the turn signal wires out with an ohm meter. Most original ignition switches are marked on the back of the switch.

The **DASH SECTION** contains the wires for the gauges, the headlight switch, radio power leads, heater, wiper and cooling fan switches. The order you install these wires depends greatly on your dash configuration. Here it is best to start working from the driver's side of the dash toward the passenger's side. Use the cable ties provided in your kit to tie up the harness as you go.

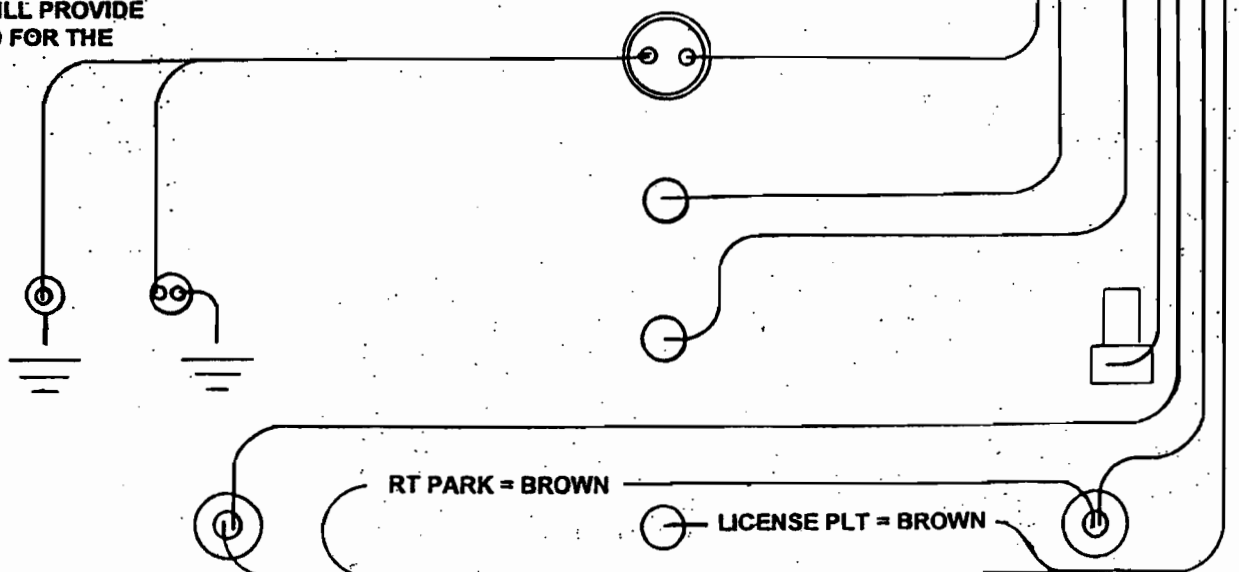
By now you should be out of wires. All that remains is a simple start up procedure. Start by turning **OFF ALL ACCESSORIES**. Place the Ignition switch in the **OFF** position and close the doors to make sure the dome light is off. Now connect the **POS. BATTERY CABLE**. **BEFORE** connecting the **NEG. CABLE** you should check for a current draw. This can be done easily with a test light connected between the neg. battery post and the neg. battery cable. No light—no draw. If you have no draw or just a really dim light, it is safe to connect the neg. battery cable and start checking the system.



FRONT SECTION DIAGRAM

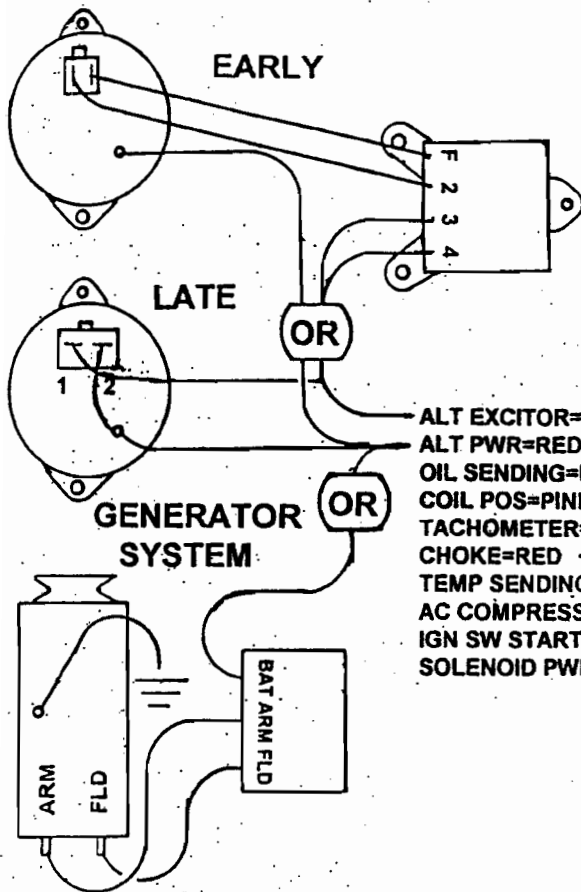


NOTE: YOUR DOOR JAM SWITCHES WILL PROVIDE THE GROUND FOR THE DOME LIGHT.

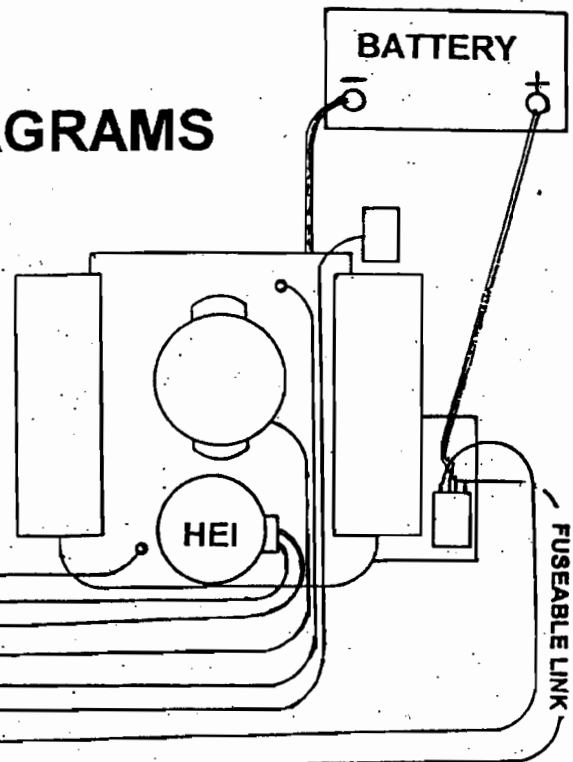


TAIL SECTION DIAGRAM

CHARGING SYSTEMS

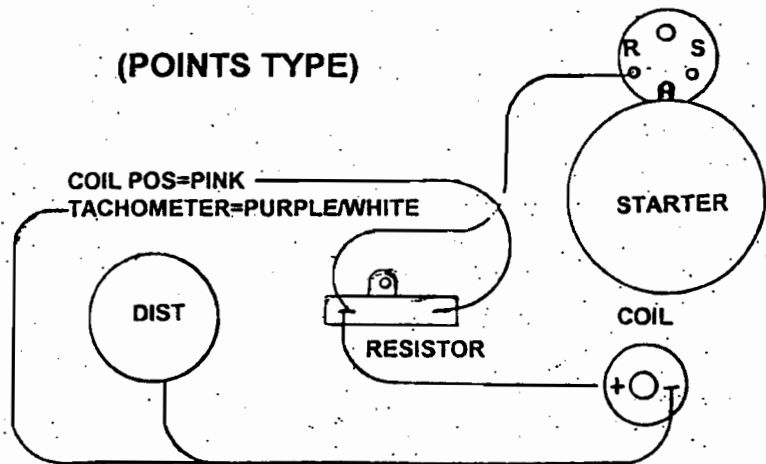


GM DIAGRAMS



GM ONE-WIRE ALTERNATOR
 IF YOU ARE USING A ONE-WIRE ALTERNATOR THE ONLY WIRE YOU NEED IS THE ALT PWR=RED WIRE. WE SUGGEST YOU STORE THE ALT EXCITOR=WHITE WIRE IN THE HARNESS IN CASE YOU NEED IT LATER.

(POINTS TYPE)



TURN SIGNAL CONVERSION

1970-1974

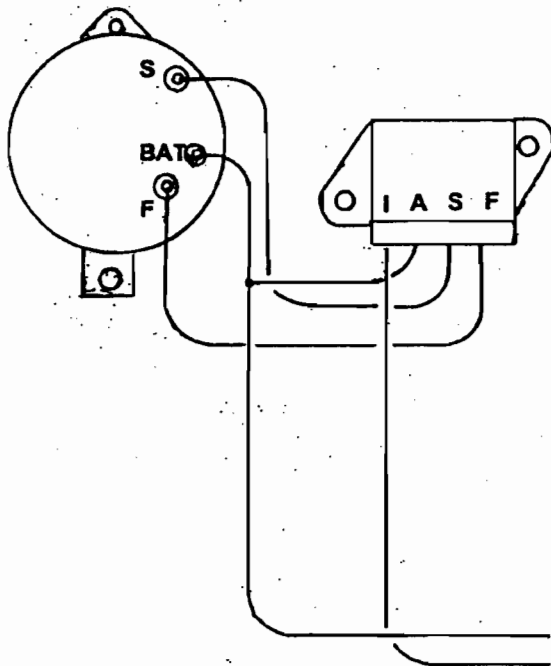
LF SIGNAL=LT BLUE	TO GREEN
RF SIGNAL=BLUE	TO TAN
LR TURN=YELLOW	TO DK GREEN
RR TURN=GREEN	TO BROWN
HORN SW=LT GREEN	TO BLACK
BRAKE SW=WHITE	TO WHITE
TURN FLASHER=PURPLE	TO RED
HAZZARD=DK BROWN	

EARLY 80'S

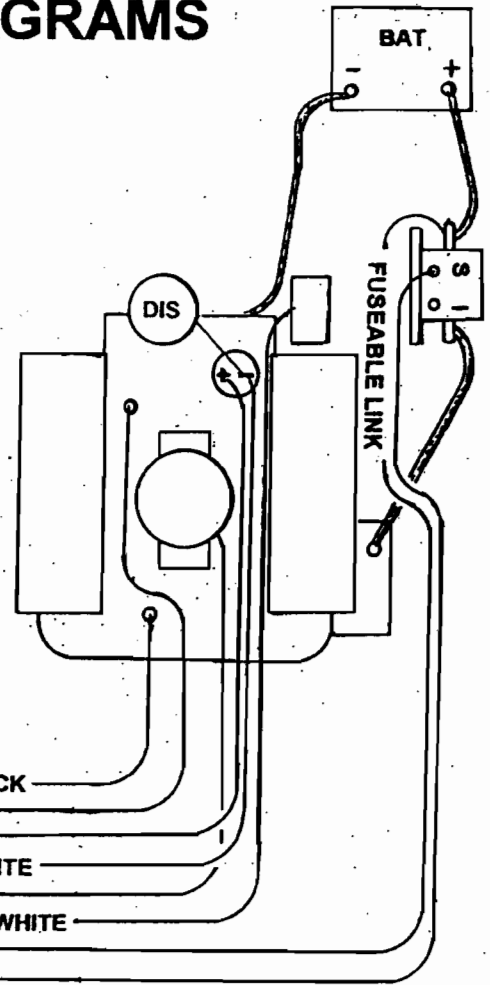
LF SIGNAL=LT BLUE	TO LT GREEN
RF SIGNAL=BLUE	TO TAN
LR TURN=YELLOW	TO DK GREEN
RR TURN=GREEN	TO BROWN
HORN SW=LT GREEN	TO BLACK
BRAKE SW=WHITE	TO WHITE
TURN FLASHER=PURPLE	TO RED
HAZZARD=DK BROWN	TO PINK

NOTE:POINTS TYPE IGNITION SYSTEMS REQUIRE A BALLAST RESISTOR TO LOWER VOLTAGE TO THE COIL AND EXTEND POINT LIFE. FORD & MOPAR USE A RESISTOR WIRE ORIGINALLY FOR THIS, BUT YOU CAN SUBSTITUTE WITH THE CERAMIC TYPE. IT IS IMPORTANT TO ALSO INSTALL A BY-PASS WIRE SO THAT THE COIL WILL HAVE FULL VOLTAGE WHEN THE ENGINE IS CRANKING. FOR **GM** USE THE DIAGRAM ABOVE. **FORD** WIRES THE SAME BUT THE BY-PASS WIRE COMES FROM THE STARTER SOLENOID TERMINAL MARKED **I**. **MOPAR** RUNS THE BY-PASS WIRE FROM THE STARTER RELAY TERMINAL **IGN**.

CHARGING SYSTEM



FORD DIAGRAMS



ALT PWR = RED
 ALT EXCITOR = WHITE
 OIL SENDING = LT BLUE/BLACK
 TEMP SENDING = LT GREEN
 COIL POS = PINK
 TACHOMETER = PURPLE/WHITE
 CHOKE = RED
 AC COMPRESSOR = BLACK/ WHITE
 SOLENOID PWR = RED
 IGN SW START = PURPLE

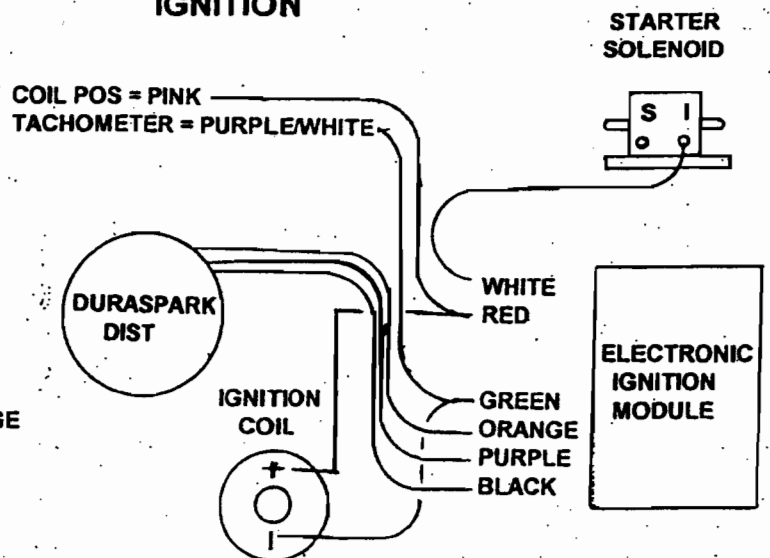
IGNITION SWITCH CONVERSION

IGN-SW PWR = RED	TO	YELLOW
IGN SW IGN = PINK	TO	RED/GREEN
IGN SW ACC = ORANGE	TO	BLACK
IGN SW START = PURPLE	TO	WHITE/BLUE

STEERING COLUMN CONVERSION

LF SIGNAL = LT BLUE	TO	GREEN/WHITE
RF SIGNAL = BLUE	TO	WHITE/BLUE
LR TURN = YELLOW	TO	GREEN/ORANGE
RR TURN = GREEN	TO	ORANGE/BLUE
HORN SW = LT GREEN	TO	YELLOW
BRAKE SW = WHITE	TO	GREEN
TURN FLASHER = PURPLE	TO	BLUE
HAZZARD = DK BROWN	TO	WHITE/RED

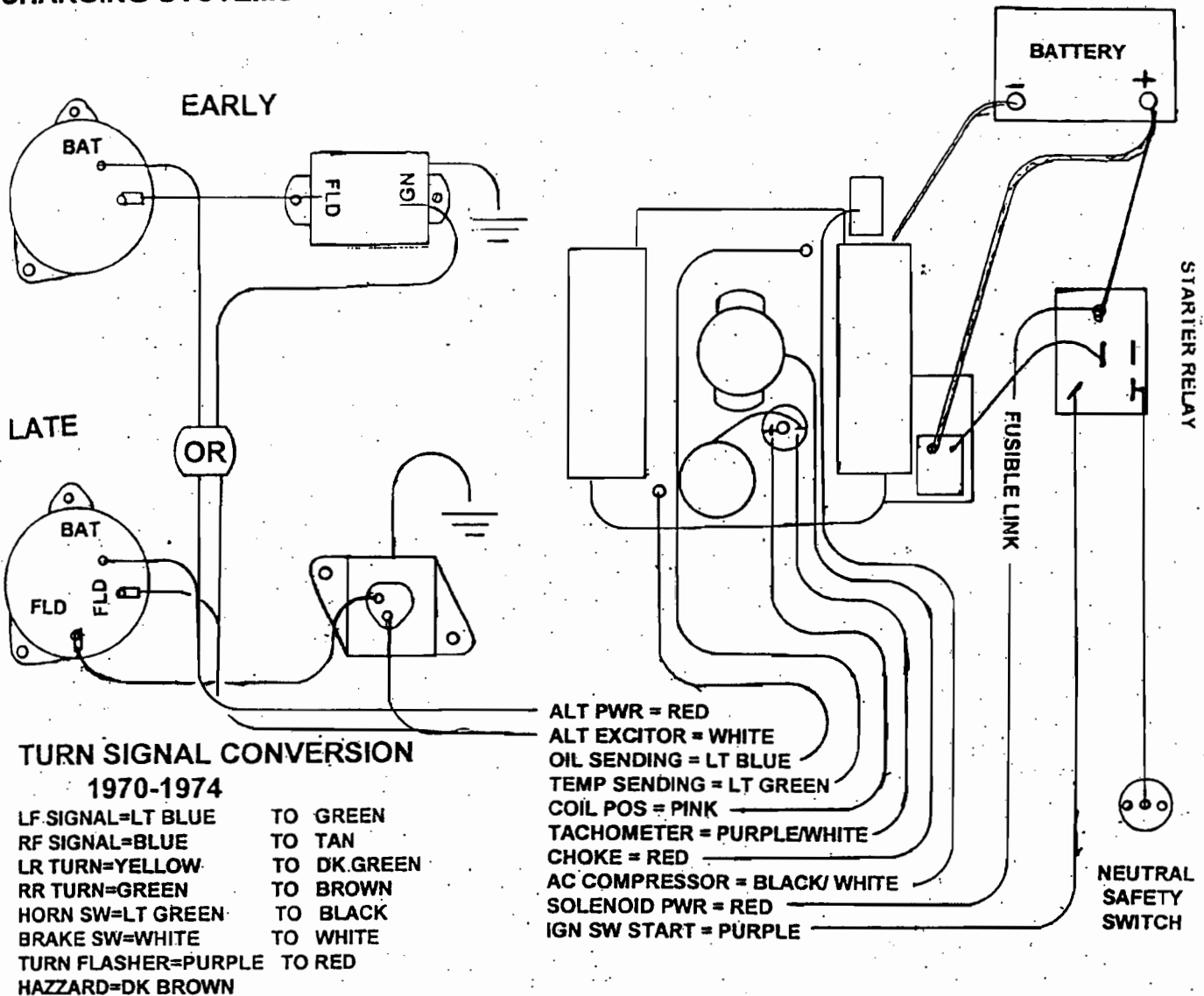
FORD ELECTRONIC IGNITION



COIL POS = PINK
 TACHOMETER = PURPLE/WHITE

CHARGING SYSTEMS

MOPAR DIAGRAMS



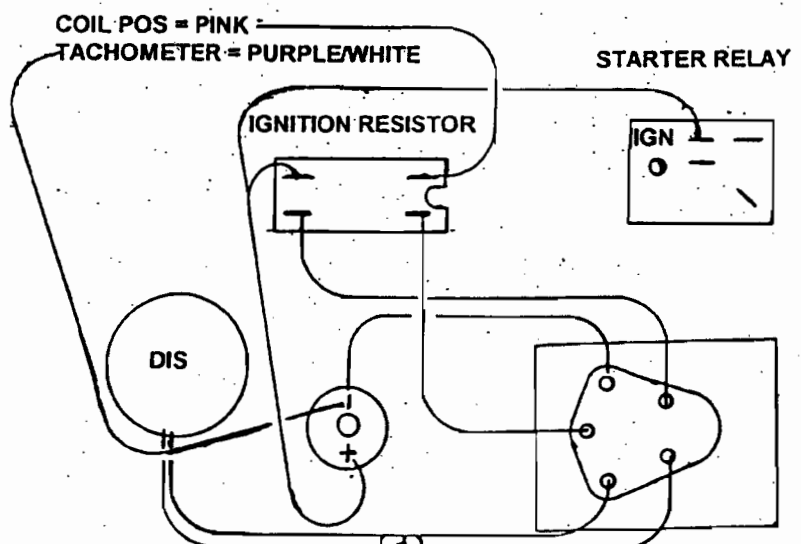
EARLY 80'S

LF SIGNAL=LT BLUE	TO LT GREEN
RF SIGNAL=BLUE	TO TAN
LR TURN=YELLOW	TO DK GREEN/RED
RR TURN=GREEN	TO BROWN/RED
HORN SW=LT GREEN	TO BLACK/RED
BRAKE SW=WHITE	TO WHITE
TURN FLASHER=PURPLE	TO RED
HAZZARD=DK BROWN	TO PINK

IGNITION SWITCH CONVERSION

IGN SW PWR=RED	TO RED
IGN SW IGN=PINK	TO BROWN
IGN SW ACC=ORANGE	TO BLUE
IGN SW ACC=BROWN	TO BLACK
IGN SW START=PURPLE	TO YELLOW

MOPAR ELECTRONIC IGNITION



WIRING'S DO'S AND DON'TS

DON'T START THIS INSTALLATION UNTIL BEFORE DISCONNECTING BOTH BATTERY CABLES.

DO INSTALL MAIN GROUND CABLES FROM THE ENGINE TO THE FRAME AND FROM THE ENGINE TO THE BODY. MAIN GROUND CABLES SHOULD BE THE SAME SIZE AS THE BATTERY CABLES

DO REMEMBER TO GROUND ALL ACCESSORIES.

DON'T FORGET, A GOOD GROUND IS A CLEAN NO RUST NO PAINT CONNECTION TO METAL.

DO USE CABLE TIES TO HELP LOOM AND SORT THE HARNESS.

DO ROUTE THE WIRES BEFORE INSTALLING TERMINALS OR MAKING CONNECTIONS.

DON'T ROUTE WIRES OVER SHARP EDGES OR NEXT TO THE EXHAUST COMPONENTS.

DON'T ROUTE WIRES TOO NEAR MOVING PARTS LIKE FANS, BELTS, STEERING GEAR, HOOD LATCHES OR HINDGES.

DO FASTEN THE HARNESS DOWN WITH CLAMPS AND TIES TO KEEP IT SECURE.

DON'T STRETCH WIRES TO MAKE THEM REACH. ALWAYS LENGTHEN AS NECESSARY.

DO USE GROMMETS WHEN PASSING WIRES THROUGH HOLES.

DO USE THE LOOM PROVIDED IN THE ENGINE COMPARTMENT.

DO USE INSULATED TERMINALS OR HEAT SHRINK OVER THE CONNECTIONS.

DO ALWAYS USE THE CORECT SIZE TERMINAL FOR THE GAUGE OF WIRE.

DON'T OVER CRIMP THE TERMINALS.

DON'T FORGET IF YOU ARE USING AN AMP METER, YOU MUST FOLLOW THE SPECIAL INSTRUCTIONS ON THE DASH DIAGRAM.

DO USE THE DIAGRAMS PROVIDED WITH AFTER-MARKET OR SPECIALTY ACCESSORIES.

DON'T SKIP AROUND- START A SECTION AND FINISH IT.

DON'T FORGET TO DO THE WORK SHEET, IT WILL SAVE YOU A LOT OF TIME.

DON'T FORGET THESE ARE ONLY GENERAL INSTRUCTIONS AND YOU MAY NEED TO MODIFY THEM FOR YOUR VEHICLE.

DON'T DISCARD THESE INSTRUCTIONS WHEN YOU ARE FINISHED. THIS WORKBOOK AND YOUR NOTES WILL BE USEFUL LATER IF YOU ARE ADDING ON OR MAKING REPAIRS.

LIST OF PARTS IN HARNESS KIT

Take time to familiarize yourself with all of the components of this kit.

This kit contains the following:

1. Pre- assembled four section labeled wiring harness
2. Prewired fuse panel
3. 2 flasher units (turn signals and hazard)
4. Prewired horn relay
5. Two Prewired headlight plugs
6. Prewired GM type Column Ignition plugs (these will not be used if your installation is not using a GM type column). The wires are sufficient in length to allow attachment to a standard dash mounted switch.
7. Prewired GM type dimmer plug (for installation in either a column or floor position)
8. GM Turn signal connectors
9. Fusable Link (3 inch black wire with ring terminal)
10. One rubber(through firewall) grommet
11. Miscellaneous insulated terminals
12. Wire ties
13. Two loose wires for neutral safety switch and panel lights
14. Rubber (through firewall) grommet

WORKSHEET pg. 1

Wire Destination	Color Code	Labeled	Gauge	Use	Move	Remove
	(not used on black wire kits)					
FRONT SECTION						
Left Low Beam	Tan	LL BEAM	14			
Left High Beam	Lt Green	LH BEAM	14			
Left Parking Light	Brown	LF Park	18			
Left Front Turn Signal	LT Blue	LF SIGNAL	18			
Right Low Beam	Tan	LR BEAM	14			
Right High Beam	Lt Green	RH BEAM	14			
Right Park Light	Brown	RF PARK	18			
Right Front Turn Signal	Blue	RF SIGNAL	18			
Horn	Green	HORN	14			
Cooling Fan	Gray	FAN	14			
Power Antenna	Purple	PWR ANTENNA	18			
Battery Power	Red	SOLENOID PWR	10			
Alternator Power	Red	ALT PWR	12			
Alternator Excitor	White	ALT EXCITOR	14			
Coil Positive	Pink	COIL POS	14			
Tachometer	Purple	TACHOMETER	18			
Oil Sender	LT Blue	OIL SENDING	18			
Water Temp Sender	Lt Green	TEMP SENDING	18			
Starter Solenoid	Purple	IGN SW START	12			
Electric Choke	Black	AC COMPRESSOR	18			
COLUMN SECTION						
Ignition Switch Bat	Red	IGN SW PWR	12			
Ignition Switch IGN	Pink	IGN SW IGN	12			
Ignition Switch Acc	Orange	IGN SW ACC	12			
Ignition Switch Acc	Brown	IGN SW ACC	12			
Ignition Switch Start	Purple	IGN SW START	12			
Neutral Safety Switch	Purple	N SAFETY	12			
Left Front Turn Signal	Lt Blue	LF SIGNAL	18			
Right Front Turn Signal	Blue	RF SIGNAL	18			
Left Rear Turn Signal	Yellow	LR TURN	14			
Right Rear Turn Signal	Green	LR TURN	14			
Horn Switch	Lt Green	HORN SW	14			
Brake Light Switch	White	BRAKE SWITCH	18			
Turn Signal Flasher	Purple	TURN FLASHER	14			
Hazard Flasher	Dk Brown	HAZARD	14			
Low Beam Switch	Tan	LR BEAM	14			
High Beam Switch	Lt Green	LH BEAM	14			
High Beam Indicator LT	Lt Green	HIGH BEAM IND	18			
Dimmer Power	Blue	DIMMER POWER	12			

You have purchased the latest version of our wiring harness kits. We have included the wiring terminals and connectors for the GM type column hookups. If you are not using a GM type column, you will find that the dimmer switch connectors will interchange with most GM style floor mounted dimmers switches. We have extended the column wires so that you can simply cut the wires and connectors that you do not need and connect to the dash type ignition and starter switch

WORKSHEET pg. 2						
Wire Destination	Color	Labeled	Gauge	Use	Move	Remove
	(not used on black wire kits)					
REAR SECTION						
Right Tail Light	Brown	RT PARK	14			
Left Tail Light	Brown	LT Park	14			
License Plate Light	Brown	LICENSE PLT	14			
Right Rear Turn Signal	Green	RR TURN	14			
Left Rear Turn Signal	Yellow	LR TURN	14			
Left Backup Light	Lt Green	L BACKUP	18			
Right Backup Light	Lt Green	R BACKUP	18			
3rd Stop Light	Orange	THIRD BRAKE	18			
Fuel Gauge Sender	Pink	FUEL GAUGE	18			
Electric Fuel Pump	Yellow	EL FUEL PUMP	14			
DASH SECTION						
Headlight Bat	Red	HEADLIGHT PWR	12			
Headlights	Blue	DIMMER PWR	12			
Taillights	Brown	LT PARK	14			
Parking Lights	Brown	LF PARK	18			
Instrument Panel Lights	Brown	INSTRU PNL LGT	14			
Left Door Lock	Yellow	L DOOR LOCK	12			
Left Power Window	Yellow	L WINDOW	14			
Right Door Lock	Yellow	R DOORLOCK	12			
Right Power Window	Yellow	R WINDOW	14			
Backup Lights	Lt Green	L BACKUP	18			
Backup Lights Power	Lt Green	BACKUP POWER	18			
Gauge Power	Red	GAUGE PWR	18			
Oil Gauge	Blue	OIL SENDING	18			
Water Temp Gauge	Green	TEMP SENDING	18			
Tachometer	Purple	TEMP SENDING	18			
Fuel Gauge	Pink	FUEL GAUGE	18			
Left Turn Indicator	Lt Blue	L SIGNAL IND	18			
High Beam Indicator	Lt Green	H BEAM IND	18			
Right Turn Indicator	Blue	R SIGNAL	18			
Radio Constant Power	Red	RADIO CONST	18			
Radio On with Ignition	Red	RADIO IGN	18			
Power Antenna	Purple	PWR ANTENNA	18			
Cooling Fan	Gray	FAN	14			
Cooling Fan	Gray	FAN PWR	14			
Stoplight Power	Orange	BRAKE SW PWR	14			
Stoplights	White	BRAKE SWITCH	14			
Air Conditioning Compressor	Black	AC COMPRESSOR	14			
Air Conditioning /Heat Power	Black	AC HEAT PWR	14			
Cigarette Lighter	Tan	CIG LIGHTER	14			
Windshield Wiper Power	Dk Blue	WIPER PWR	14			
Cruise Control Power	Pink	CRUISE	18			

INSTALLATION OF FUSE BLOCK TO FIREWALL ...

- 1. ONCE FINAL LOCATION OF FUSE BLOCK IS DETERMINED, TURN FUSE BLOCK OVER TO BACKSIDE, AND REMOVE MOUNTING PANEL: USE A SMALL SCREWDRIVER TO RELEASE THE [4] CORNER CLIPS. THIS WILL RELEASE THE MOUNTING PANEL FROM FUSE BLOCK.**
- 2. DRILL [2] 1/8" HOLES @ MOUNTING TABS. USE SELF TAPPING SCREWS AND OR FASTENERS OF YOUR CHOICE [FASTENERS NOT SUPPLIED], TO MOUNT PANEL TO FIREWALL OF VEHICLE.**
- 3. WITH MOUNTING PANEL SECURELY IN PLACE, ALIGN THE [4] CORNER CLIPS WITH FUSE BLOCK AND SNAP FUSE BLOCK INTO PLACE. INSTALL FRONT COVER. INSTALLATION COMPLETE!**