WIRING DIAGRAMS

WIRE COLOR CODES

First color of a wire is the main color. Second color is the tracer.

Example: YELLOW/BLACK (YL-BK) is a YELLOW wire with a BLACK tracer.

WIRE DIGIT CODES

First number indicates in which connector the wire is plugged in.

Second number indicates the position of the wire in the connector.

The letter at the end of the number (if applicable) indicates a common circuit in the MPEM printed circuit with another wire bearing the same letter.

Example: 2-18 (g)

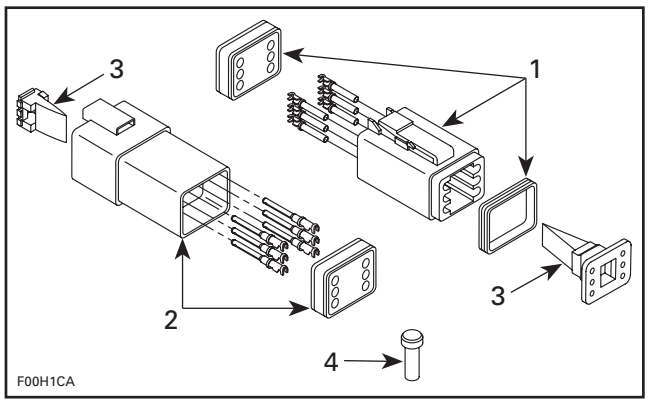
The first number indicates that the wire is positioned in the connector **no. 2** of the MPEM.

The second number indicates that the wire is positioned in the terminal **no. 18**.

The letter (g) indicates a common circuit with another wire(s) bearing the same letter (g) in the circuit.

DEUTSCH CONNECTORS

Deutsch connectors are used to connect wiring harness to magneto, and to electrical box (**some models**) and to the VCK on **DI Models**.

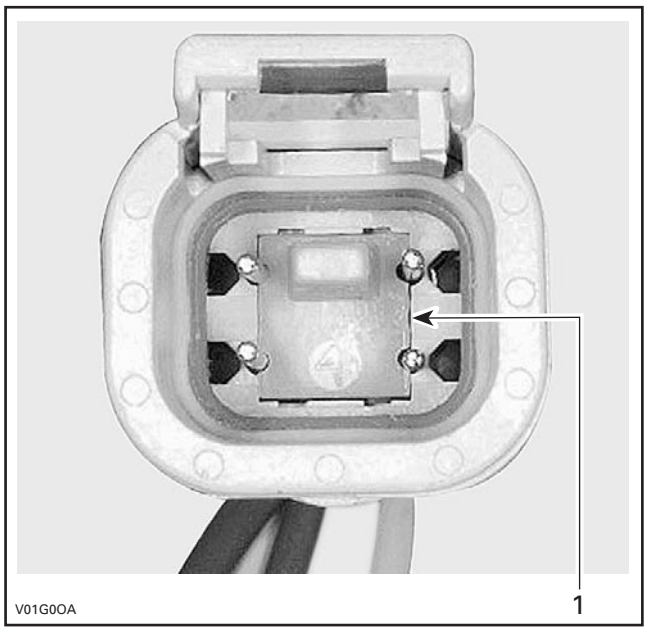


1. Male housing
2. Female housing
3. Secondary lock
4. Sealing cap

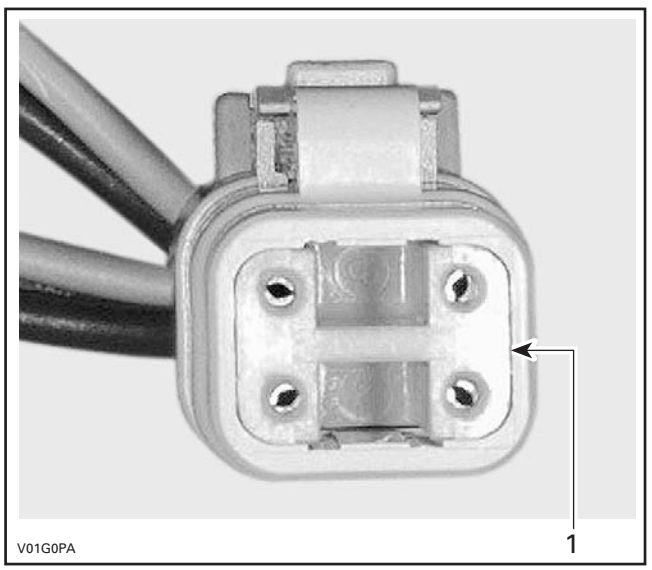
CAUTION: Do not apply dielectric grease on contacts inside plug connector.

To remove wire contacts from housing, proceed as follows:

– Using a long nose pliers, pull out the lock.



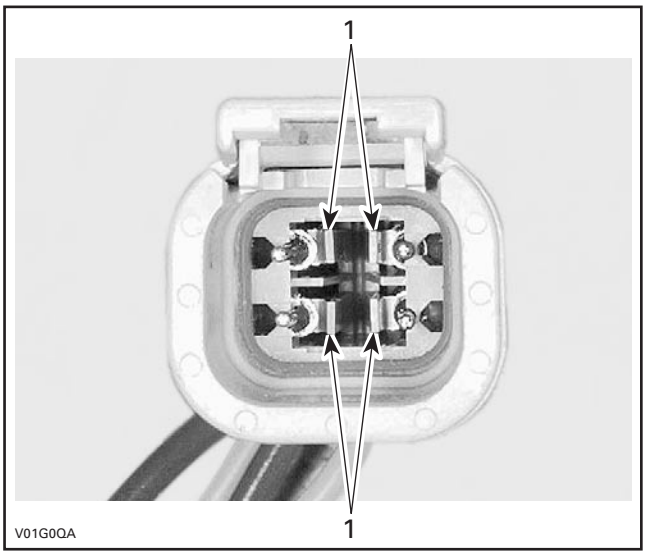
FEMALE HOUSING
1. Female lock



MALE HOUSING
1. Male lock

NOTE: Before extraction, push wire forward to relieve pressure on retaining tab.

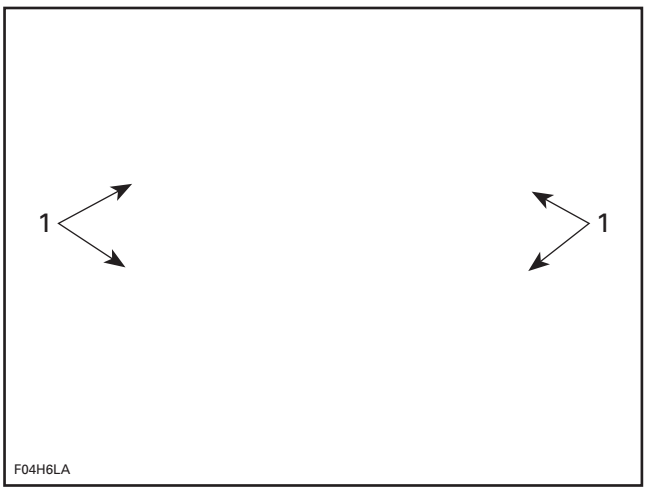
– Insert a 4.8 mm (.189 in) wide screwdriver blade inside the front of the contact cavity.
– Pry back the retaining tab while gently pulling wire back until contact is removed.



FEMALE CONNECTOR HOUSING
1. Retaining tab

To install:

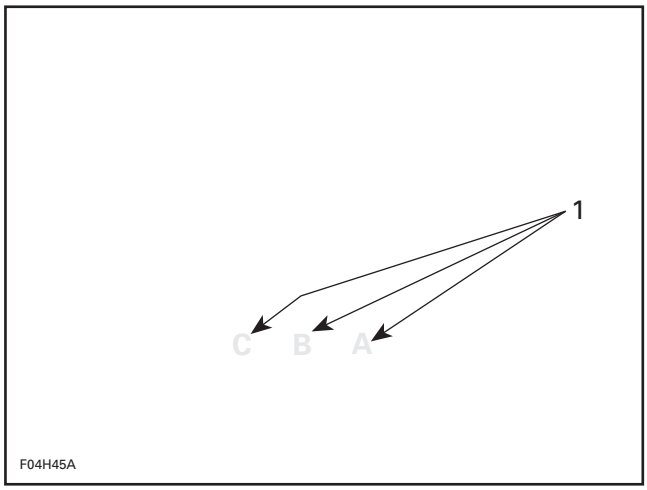
– For insertion of signal contact, make sure the lock is removed.
– Insert contact into appropriate circuit cavity and push as far as it will go.
– Pull back on the contact wire to be sure the retention fingers are holding the contact.
– After all required contacts have been inserted, the lock must be installed.



1. Wire identification numbers

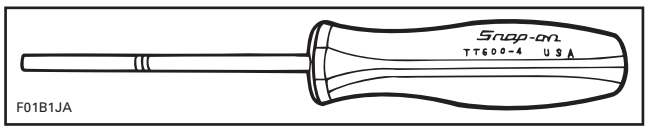
PACKARD CONNECTOR

Packard connectors are used to connect electrical harnesses and gauges.



VIEW OF A 3-POSITION PACKARD CONNECTOR
1. Identification letters

To remove terminal from Packard connector housing, use Snap-on TT600-4 tool.



WARNING

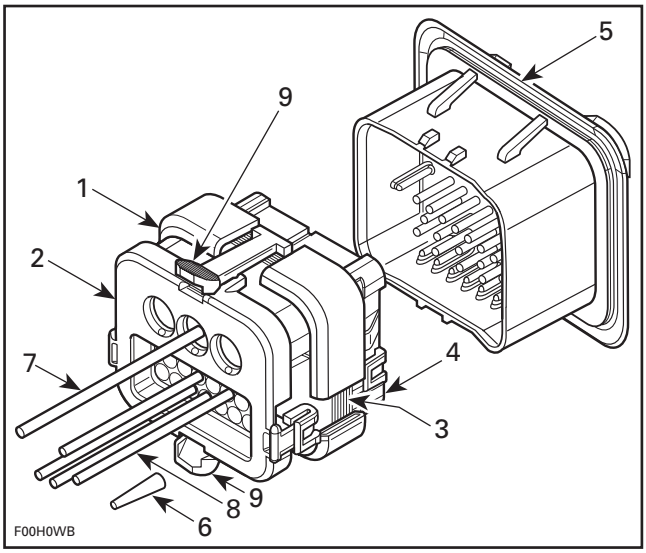
Ensure all terminals are properly crimped on wires and connector housings are properly fastened.

AMP PLUG CONNECTOR

These connectors are found on the MPEM.

When servicing electrical system, special care must be taken when working with AMP plug connectors in order to prevent any malfunction of the system.

Description

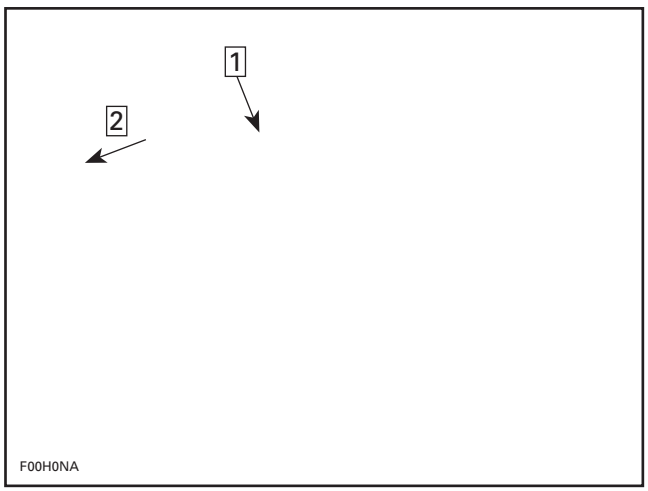


AMP PLUG CONNECTOR

1. *Plug assembly*
2. *Cover assembly*
3. *Mating seal*
4. *Wedge lock*
5. *Header assembly*
6. *Seal plug*
7. *Power wire*
8. *Signal wire*
9. *Locking tab*

Removal

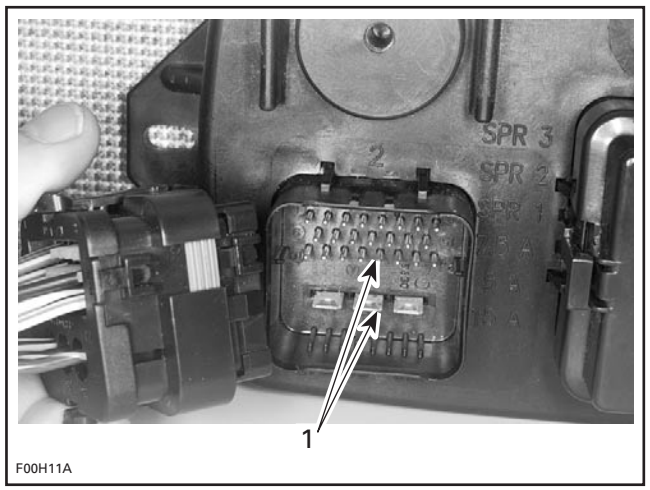
To remove the plug connector from the header assembly, press both tabs and pull plug.



Step 1: Press tabs (both sides)
Step 2: Pull plug

Installation

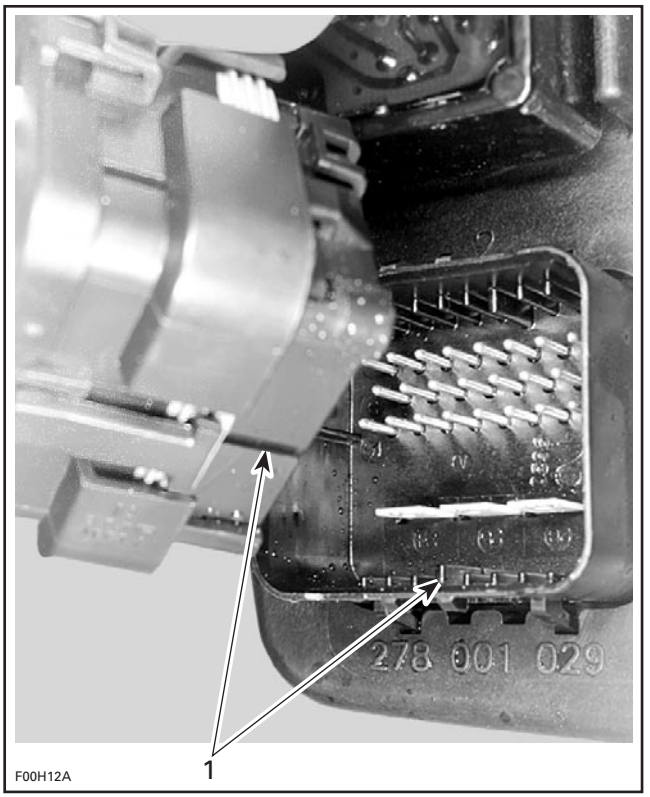
Apply a thin coat of DEOXIT contact lubricant (P/N 293 550 015) to the pins of the header on the MPEM only.



1. Apply a thin coat of DEOXIT contact lubricant

CAUTION: Do not apply lubricant excessively. Care must be taken so that the lubricant will not come in contact with the mating seal; the seal may loose its sealing capacities. Do not apply lubricant on contacts inside plug connector.

Each plug assembly is mechanically keyed to mate only with identical mechanical keyed header on the MPEM.



1. Mechanically keyed

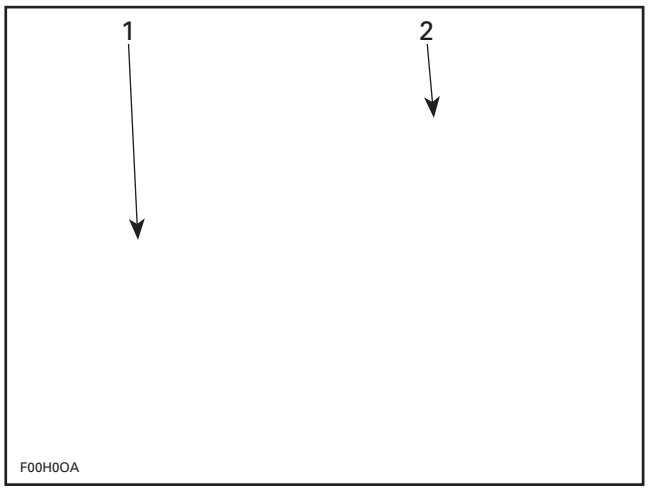
Contact Removal

SIGNAL WIRE

Insert a screwdriver blade between the connector and the wedge lock tab.

Release the locking tab and at the same time, pry open the wedge lock to open position.

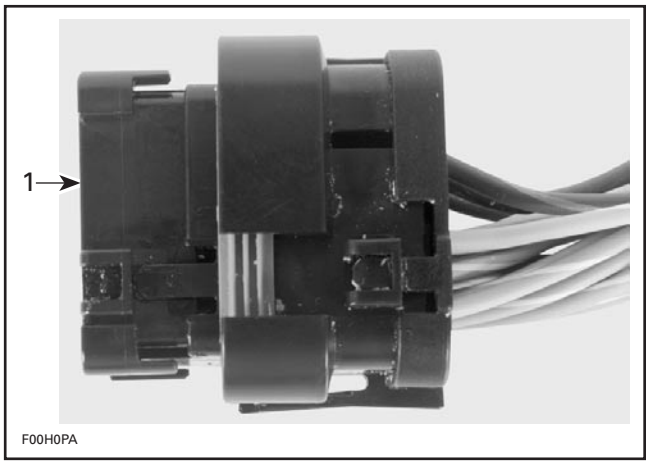
CAUTION: The wedge lock should never be removed from the connector for insertion or removal of the signal wire contacts.



1. Screwdriver between wedge lock and connector
2. Locking tab

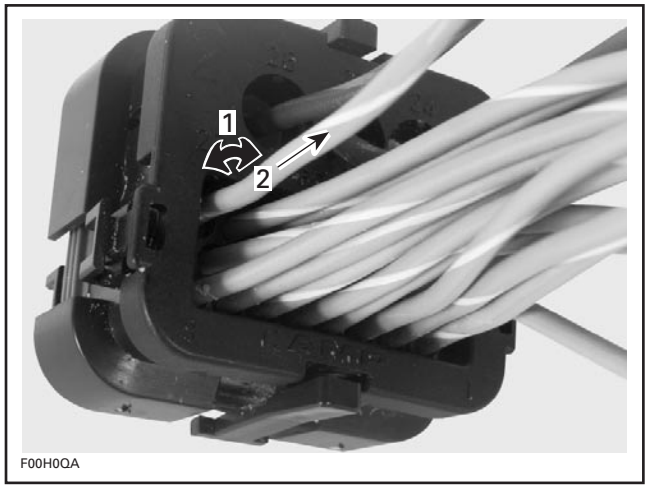
Repeat the same steps for the other locking tab retaining the wedge lock.

The wedge lock is now in the open position.



1. Wedge lock opened

While rotating the wire back and forth over a half turn (1/4 turn in each direction), gently pull the wire until the contact is removed.



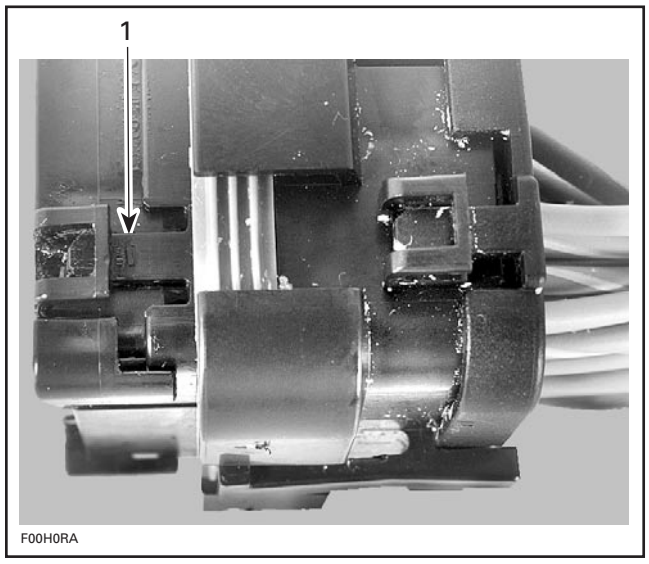
1. Rotate wire back and forth
2. Pull wire

POWER WIRE CONTACT

NOTE: The wedge lock must be removed to extract power contact.

Open the wedge lock.

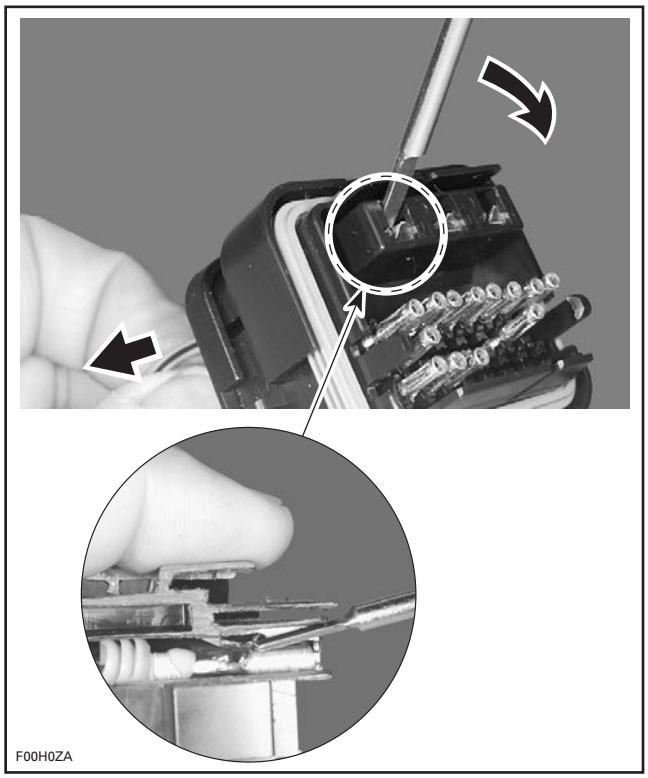
Pull both locking tabs and remove wedge lock from plug assembly.



1. Pull locking tab (both sides)

Before extraction, push wire forward to relieve pressure on retaining tab.

Insert a 4.8 mm (.189 in) wide screwdriver blade inside the front of the contact cavity.



Pry back the retaining tab while gently pulling wire back until contact is removed.

Contact Crimping

The size of the wires must be 20 to 16 AWG with a wire insulation diameter having a minimum dimension of 1.7 mm (.067 in) and a maximum dimension of 2.78 mm (.106 in).

The wire strip length shall be 5.1 mm (13/64 in).

NOTE: When stripping wires, ensure conductor is not nicked, scrapped or cut. Wire stripping tool jaws may leave marks on the surface of the wire insulation. If these marks occur at the location of the wire seal, leakage may result. Insulation surface within 25 mm (1 in) from the tip of the contact must be smooth.

All contacts in AMP plug connectors must be crimped using the crimping tool (P/N 295 100 164).

CAUTION: If contacts are not crimped using the proper crimping tool, the wire seal may be damaged.

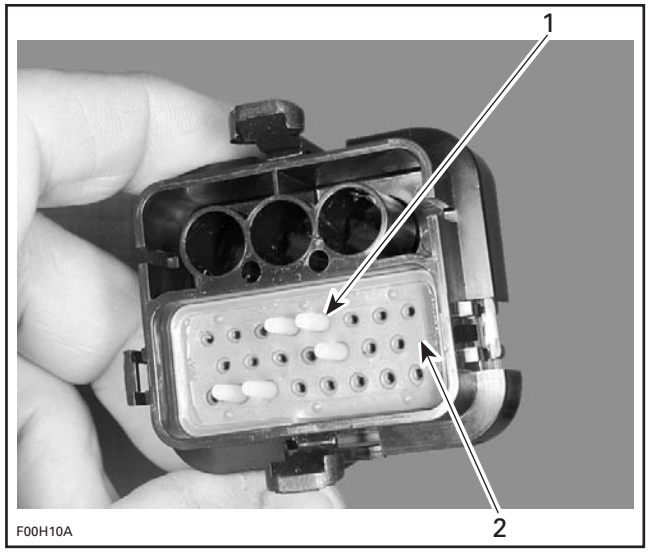


CRIMPING TOOL (P/N 295 100 164)

All circuits are sealed by a diaphragm in the rubber wire seal. When installing wire contacts in plug connector, the diaphragm is pierced as the contact passes through it.

If the diaphragm is pierced and the cavity is not used, install a seal plug, large end first, into circuit cavity as far as it will go.

NOTE: It is suggested that all unused circuit cavities be sealed with a seal plug, even if they are not pierced.



1. *Seal plug*
2. *Wire seal*

CAUTION: Do not pierce the diaphragm with a sharp point for electrical troubleshooting. The resulting pinholes in the insulation will allow moisture to penetrate the system and possibly result in system failure.

Contact Installation

For insertion of signal contact, make sure the wedge lock is in the open position.

NOTE: For insertion of power contact, the wedge lock may or may not be on the open position.

Insert contact into appropriate circuit cavity and push as far as it will go.

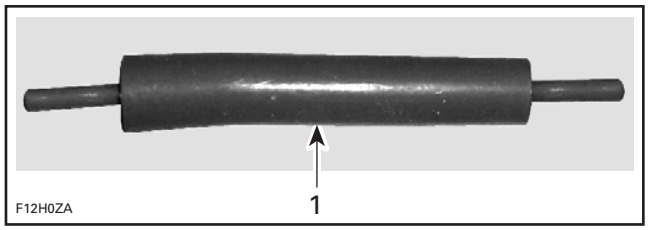
Pull back on the contact wire to be sure the retention fingers in the housing are holding the contact properly.

After all required contacts have been inserted, the wedge lock must be closed to its locked position.

MAIN FUSE HOLDER JOINT CONNECTOR

DI Models

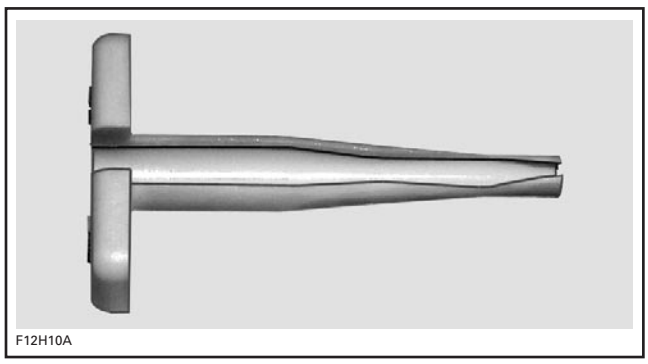
The fuse holder is located in the rear electrical box.



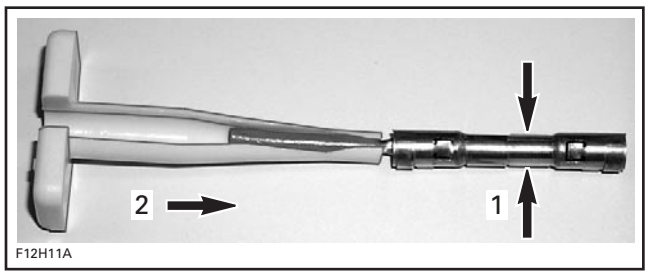
1. Main fuse holder joint connector

NOTE: In the following illustrations, the joint insulator has been removed for clarity purpose only. It is not necessary to remove it to separate the joint. The same procedure is to be used each side of the joint.

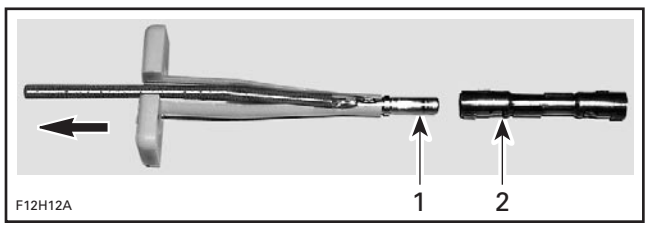
Insert the Deutsch joint connector tool (no. 114010) on the wire and push tool toward the joint to release it. While holding the joint insulator, push the tool until it bottoms. It is now unlocked. Maintaining the pressure with the tool, pull the wire out.



DEUTSCH JOINT CONNECTOR TOOL (NO. 114010)



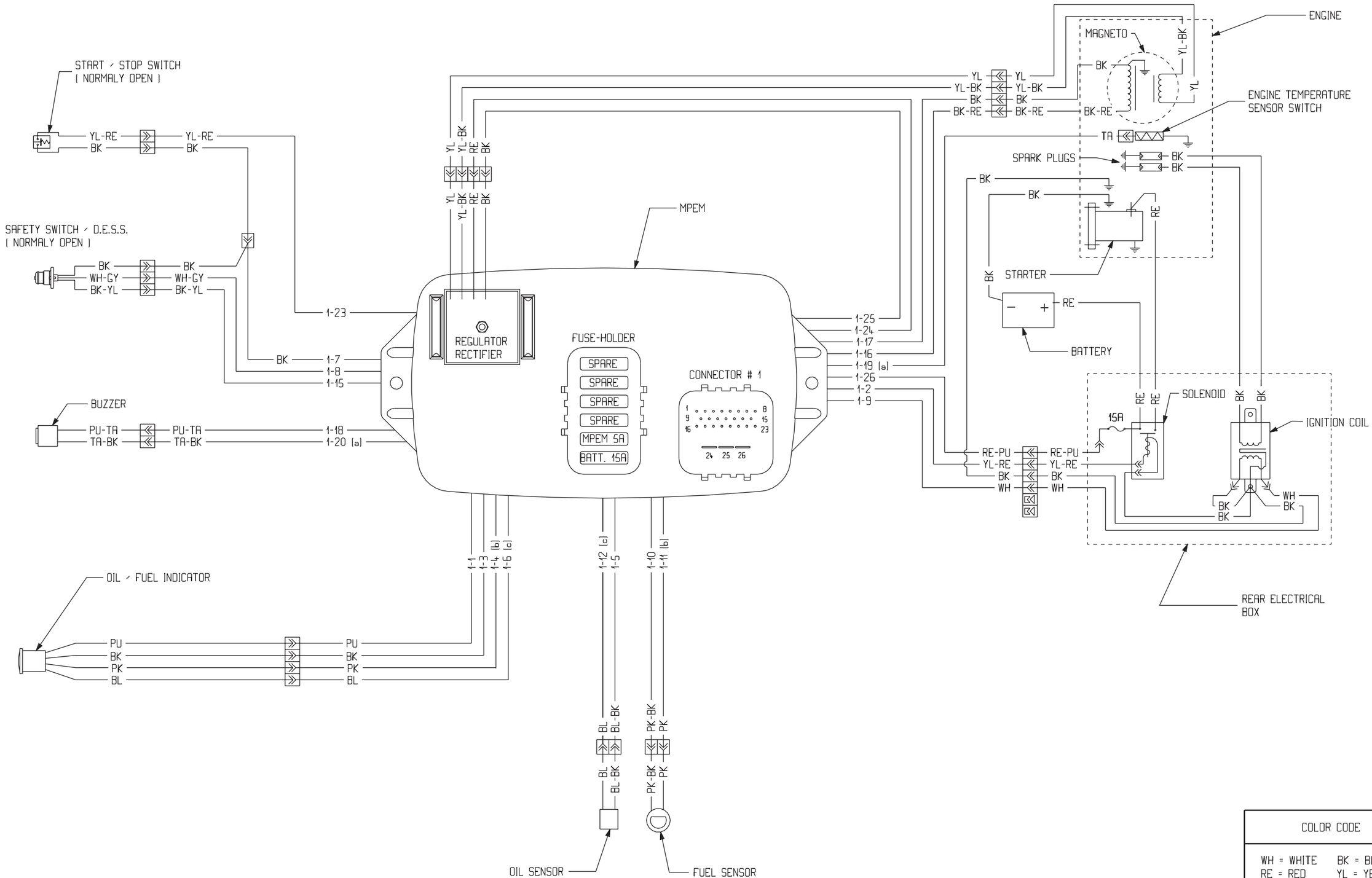
1. Hold the insulator
2. Push the tool until it bottoms



1. While holding tool pressure, pull wire until terminal releases
2. Joint connector

For installation, simply push the wire in the connector. You should hear a locking "click". Try to pull the wire out to ensure terminal is properly locked. If not, remove the wire and bend the tabs inside the joint connector to allow proper locking. Recheck.

2002 GTI MODEL

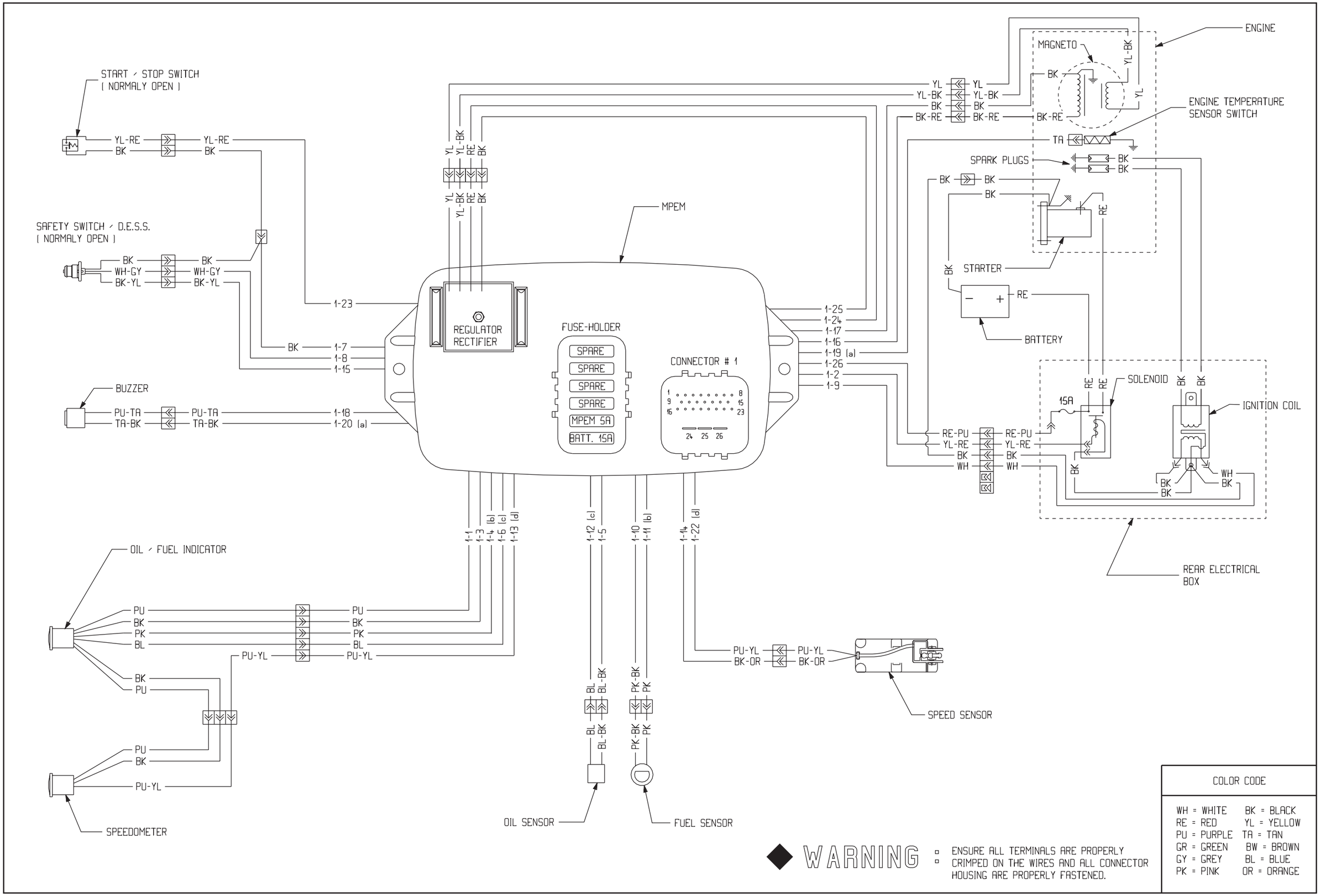


WARNING

- ENSURE ALL TERMINALS ARE PROPERLY CRIMPED ON THE WIRES AND ALL CONNECTOR HOUSING ARE PROPERLY FASTENED.

COLOR CODE	
WH = WHITE	BK = BLACK
RE = RED	YL = YELLOW
PU = PURPLE	TA = TAN
GR = GREEN	BW = BROWN
GY = GREY	BL = BLUE
PK = PINK	OR = ORANGE

2002 GTI LE MODEL



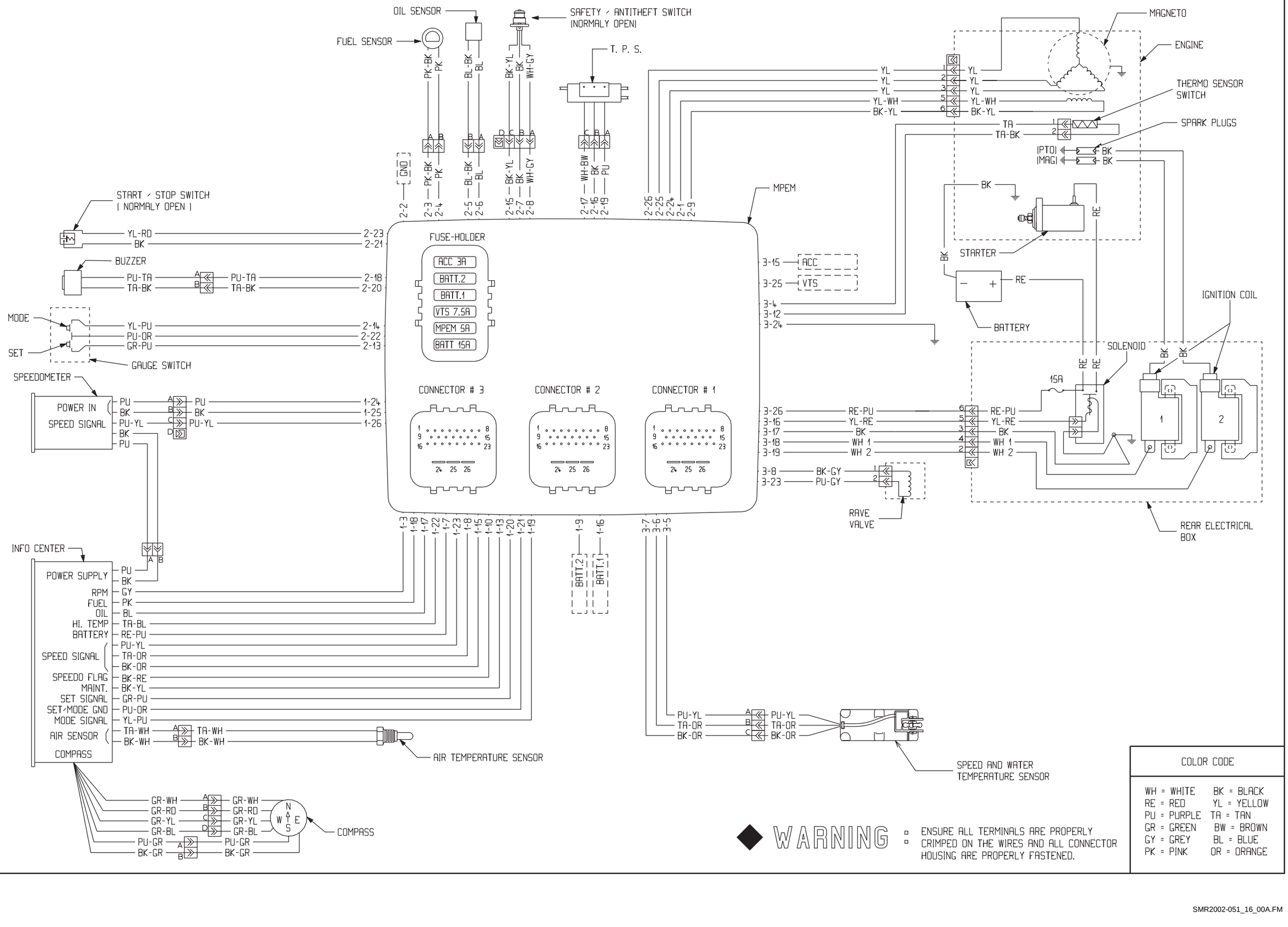
COLOR CODE	
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2002 GTX MODEL



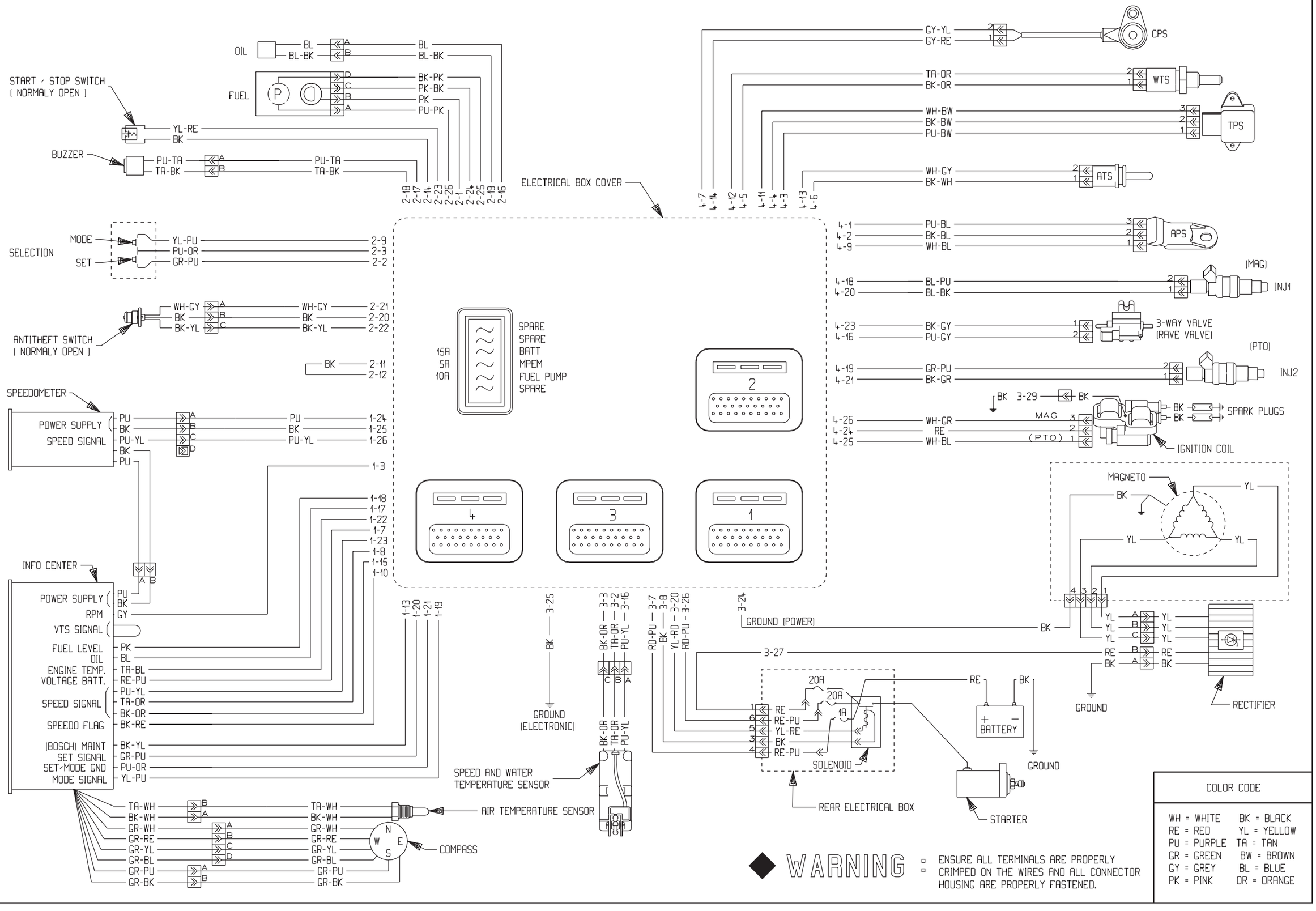
WARNING

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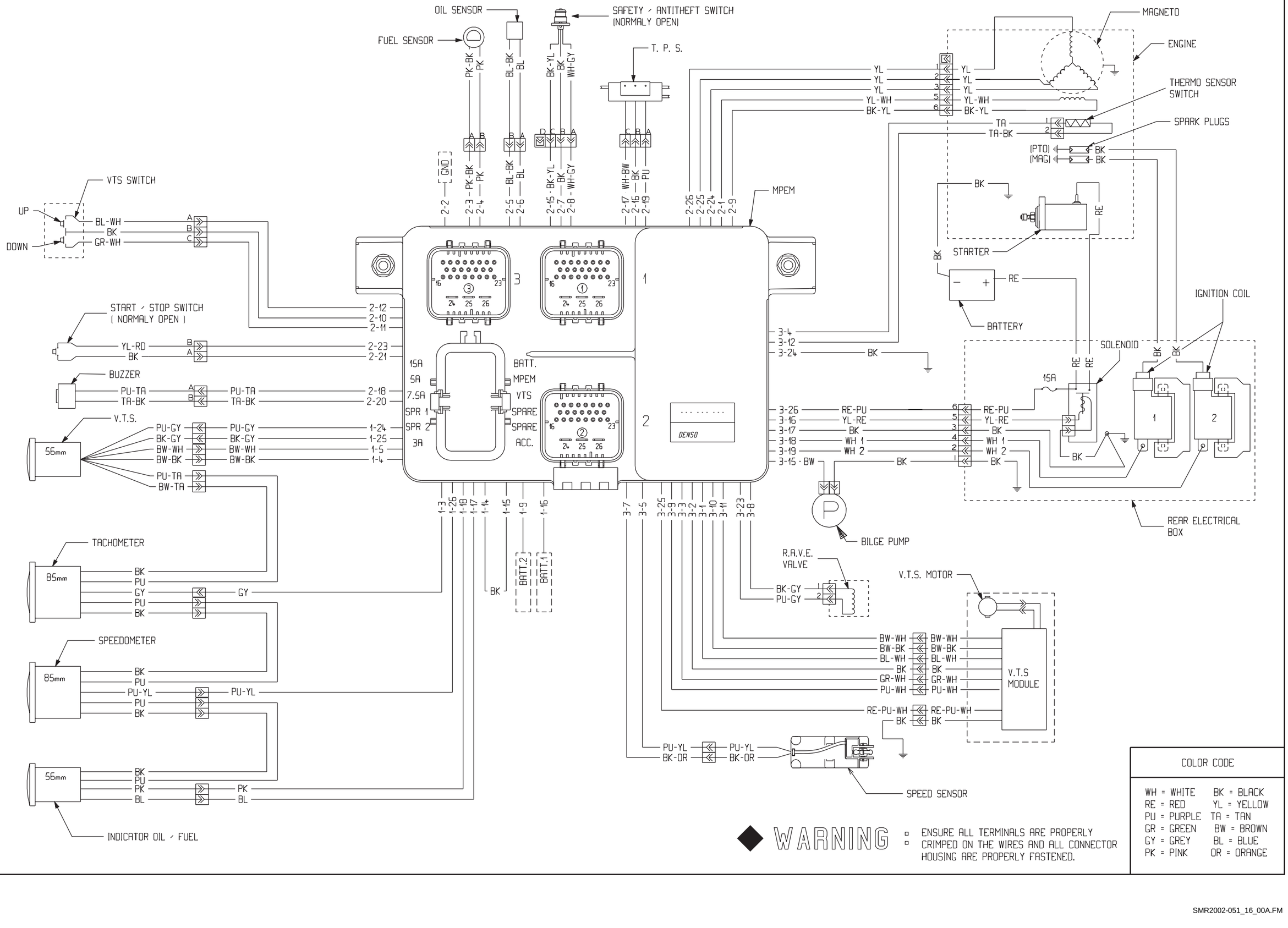
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2002 GTX RFI MODEL



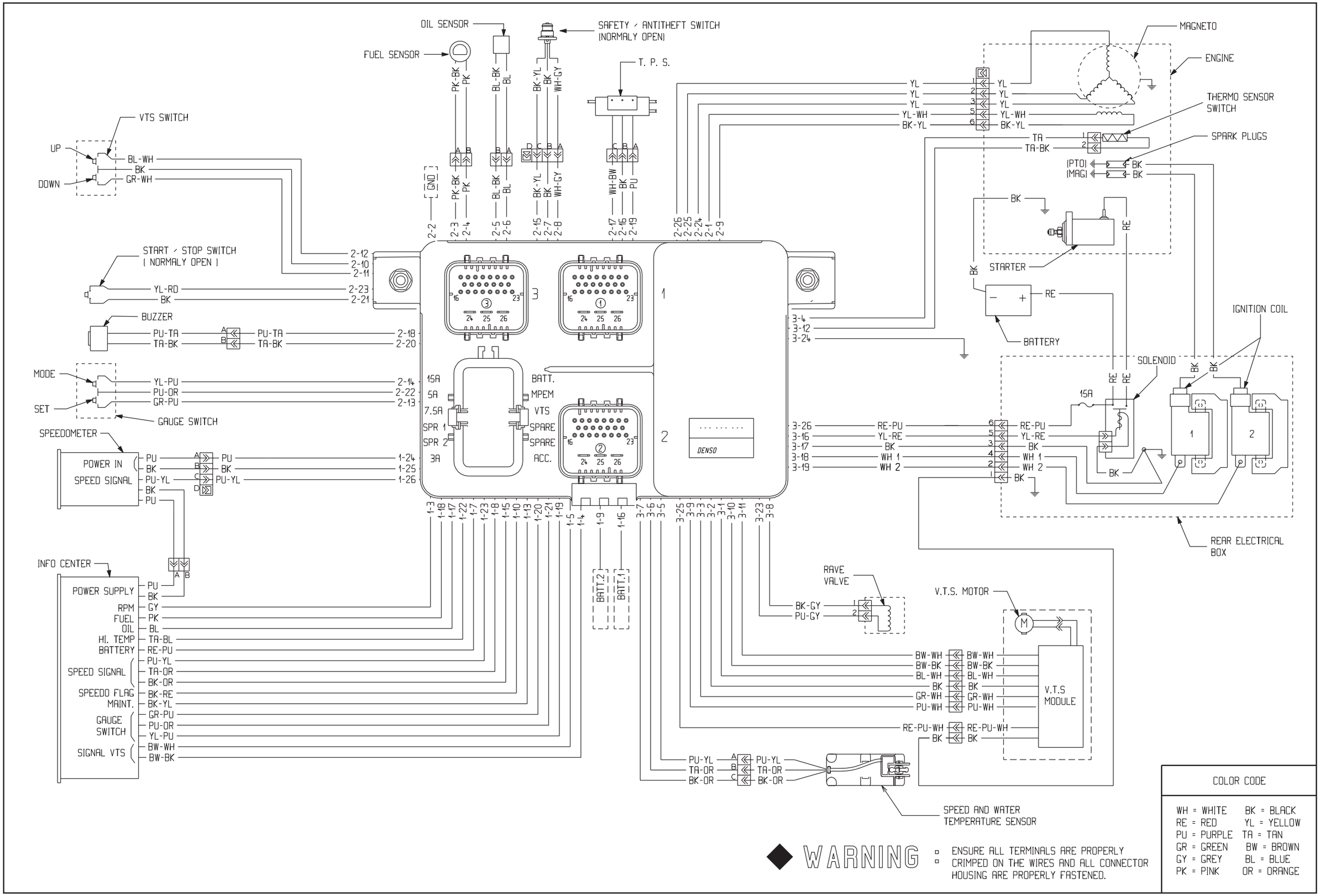
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2002 XP MODEL



SMR2002-051_16_00A.FM

2002 RX MODEL



WARNING

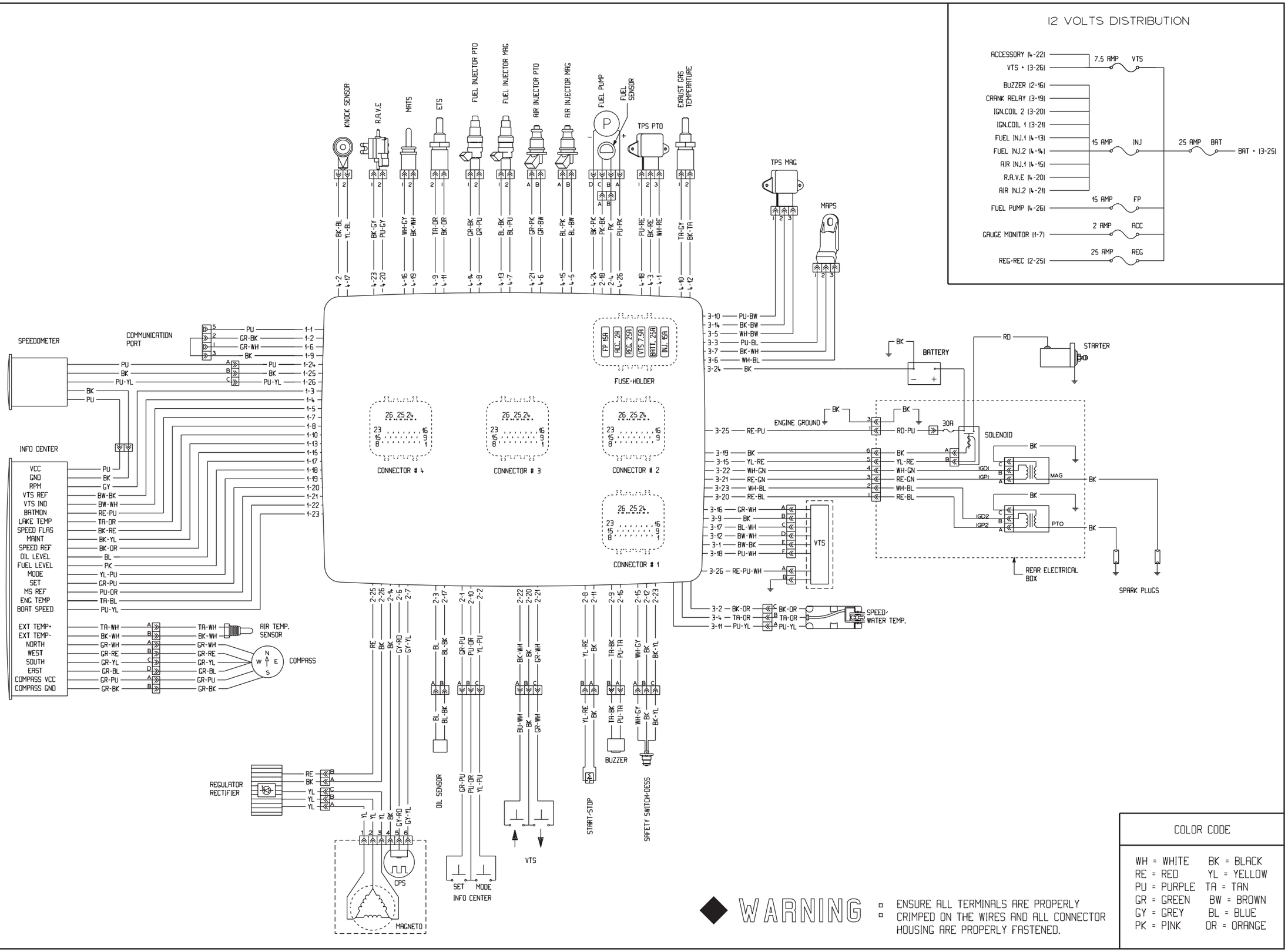
ENSURE ALL TERMINALS ARE PROPERLY CRIMPED ON THE WIRES AND ALL CONNECTOR HOUSING ARE PROPERLY FASTENED.

COLOR CODE

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PK = PINK	OR = ORANGE

SMR2002-051_16_00A.FM

2002 RX DI MODEL



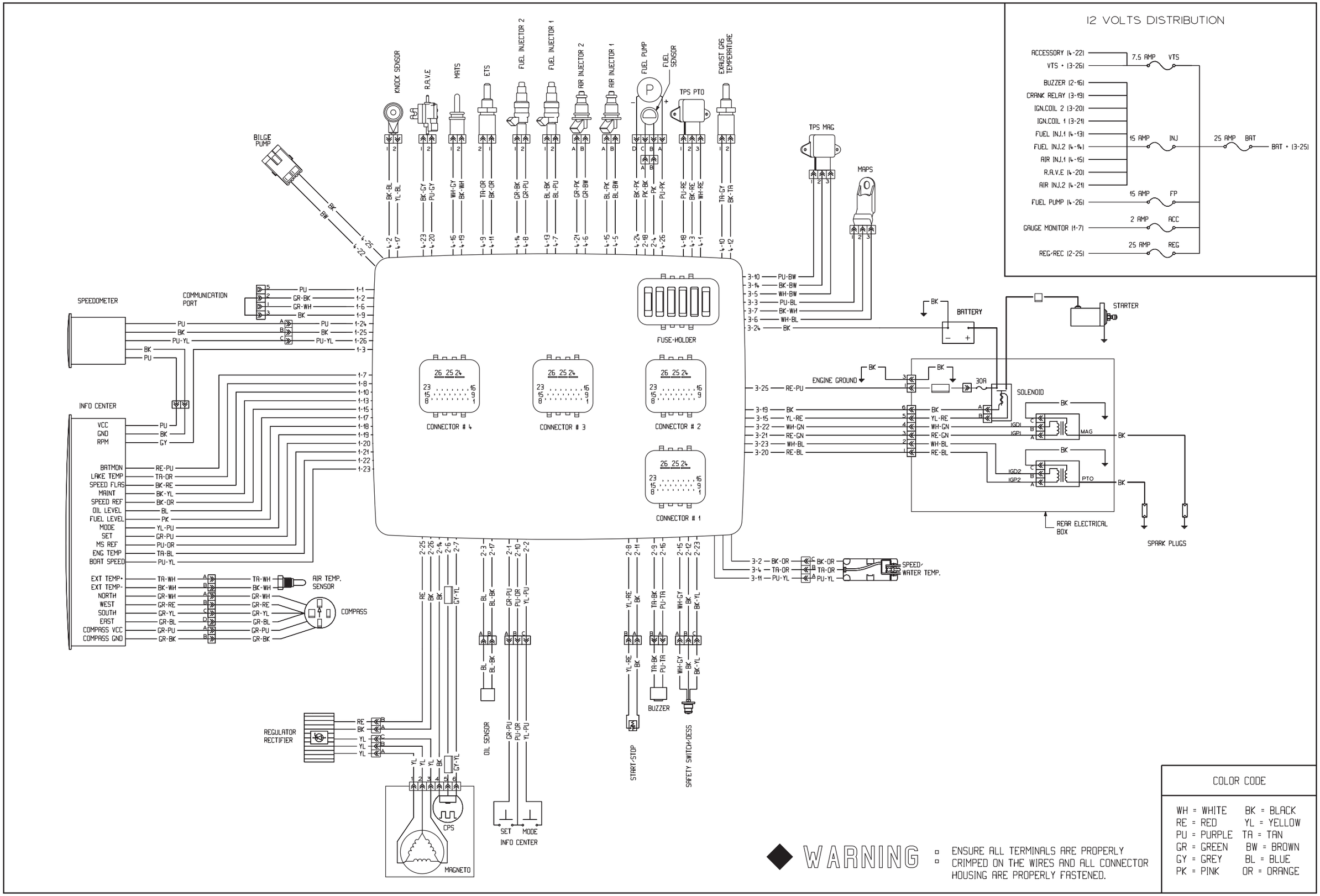
COLOR CODE

WH = WHITE	BK = BLACK
RE = RED	YL = YELLOW
PU = PURPLE	TA = TAN
GR = GREEN	BW = BROWN
GY = GREY	BL = BLUE
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WARNING ENSURE ALL TERMINALS ARE PROPERLY CRIMPED ON THE WIRES AND ALL CONNECTOR HOUSING ARE PROPERLY FASTENED.

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2002 LRV DI MODEL



SMR2002-051_16_00A.FM