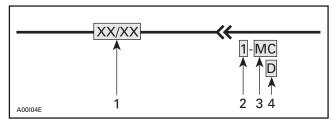
WIRING DIAGRAMS

Wiring diagrams can be found at the end of this subsection.

WIRING DIAGRAM LEGEND

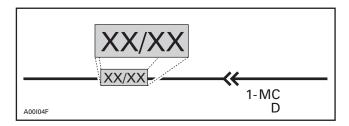
⚠ WARNING

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



- 1. Wire colors
- 2. Connector housing area
- 3. Housing code per area
- 4. Wire connector location in housing

WIRE COLORS



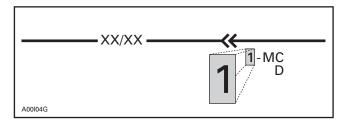
The first color of a wire is the main color, second color is the stripe.

Example: YL/BK is a YELLOW wire with a BLACK stripe.

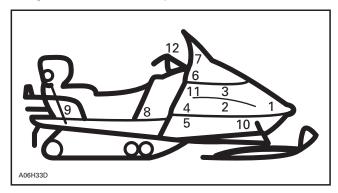
COLOR CODE								
BE	_	BEIGE		OR	_	ORANGE		
BK	_	BLACK		RD	_	RED		
BU	_	BLUE		VI	_	VIOLET		
BR	_	BROWN		WH	_	WHITE		
GN	_	GREEN		YL	_	YELLOW		
GY	-	GREY						

CONNECTOR HOUSING AREA

The first digit of the connector identification number presents the location of the connector on the vehicle.



The following illustration shows the snowmobile with number on it. These numbers will correspond with the locations of the connector on the vehicle along with a brief description.

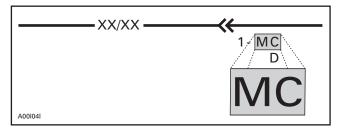


AREA	LOCATION			
1	Front of engine compartment			
2	Right hand side of engine			
3	Engine			
4	Near right hand side footrest			
5	Near driven pulley			
6	Under console			
7	Under hood			
8	Near fuel tank			
9	Rear of seat			
10	Under engine			
11	Near steering column or on air intake silencer			
12	On handlebar			

Subsection 01 (WIRING DIAGRAMS)

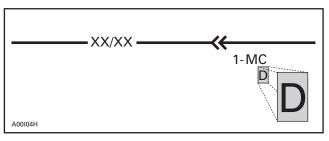
HOUSING REFERENCE PER AREA

The next two letters of the connector identification number represents a connector reference. If there are many connectors in the same area this helps identify which wire is in which connector.



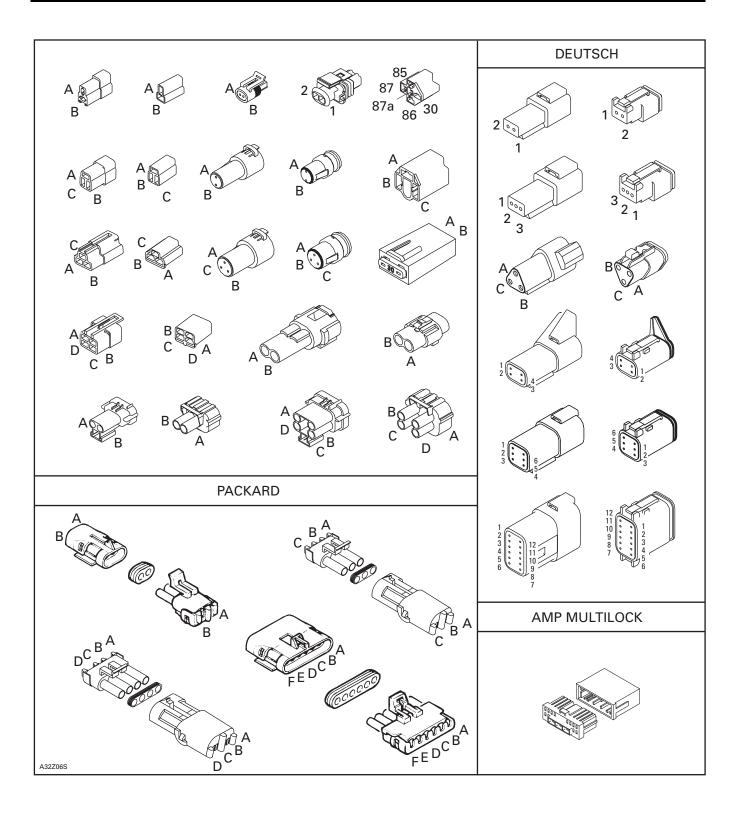
WIRE LOCATION IN CONNECTOR HOUSING

The third portion of the connector identification number represents the location of the wire in the connector housing. This could be identified by either a number such as 1, 2, 3 or by a letter such as A, B, C depending on the type of connector used.



09-01-2 MMR2003_045_09_01A.FM

Subsection 01 (WIRING DIAGRAMS)



Subsection 01 (WIRING DIAGRAMS)

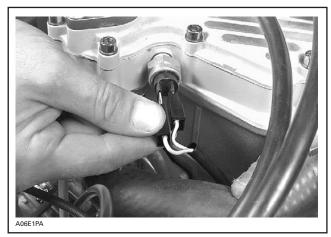
SYMBOLS DESCRIPTION

Beam and tail light	Female terminal	Male terminal	Electronic module						
			XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						
Meter	Electric motor	Low level sensor	Buzzer						
Ignition coil	Normally close switch	Normally open switch	Male terminal on instrument						
		• •							
Engine ground	Frame ground	Spark plug	Meter movement						
<u> </u>	_ <u>=</u> Frame								
Bulb	Pilot	Analog sensor	Solenoid valve						
Magneto (Delta)	3 position switch	Heating element	Fuse						
Trigger coil	Battery	Diode	Partially illustrated component						
	<u>-</u>								
A00E9PS									

09-01-4 MMR2003_045_09_01A.FM

UNPLUGING CONNECTORS

Always unplug connectors by pulling on housing not on wire.

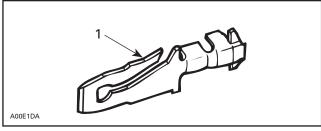


TYPICAL

TAB AND RECEPTACLE CONNECTORS REMOVAL

Tab Connector

It is locked in its housing by a spring tab on its side. Removal is done by squeezing this tab.

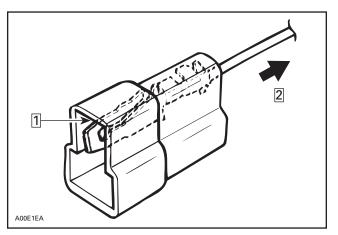


TAB CONNECTOR

1. Locking tab

To remove:

- Insert a screwdriver or Snap-on TT 600-5 from opposite side of wire and pry locking tab.
- While holding locking tab pried, pull connector toward wire side.

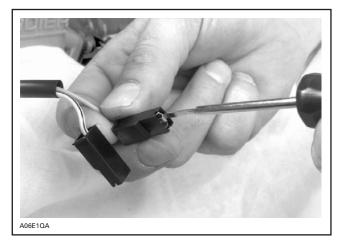


Step 1: Insert screwdriver here Step 2: Pull this side

Locking Receptacle Connector

To remove:

 Insert tool Snap-on TT 600-5 in access opening then pull housing toward wire side.



Subsection 01 (WIRING DIAGRAMS)

Waterproof Connector Housing

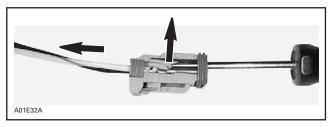
Female Connector Housing

To remove:

 Insert tool Snap-on TT 600-5 under lock and twist to lift it.



 Pry tab to free connector then pull wire out of housing.

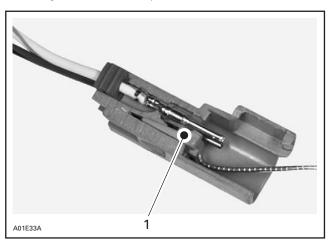


FEMALE CONNECTOR HOUSING — CUT-AWAY

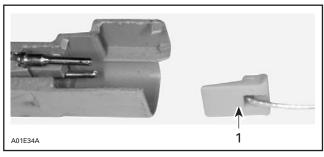
Male Connector Housing

To remove:

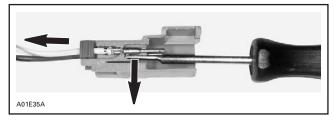
- Using a small hook, pull out the lock.



Lock

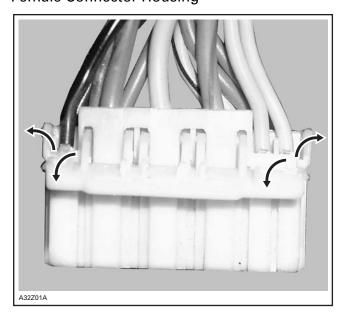


- 1. Lock
- Pry tab to free connector then pull wire out of housing.



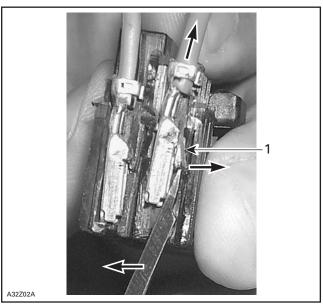
MALE CONNECTOR HOUSING — CUT-AWAY

Multilock Connector Housing Female Connector Housing



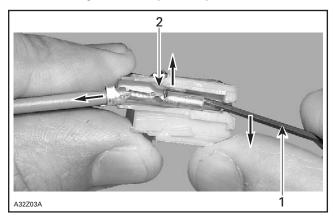
To remove:

- Insert tool AMP- 755430-2 under lock and twist to lift it.



FEMALE CONNECTOR HOUSING — CUT-AWAY

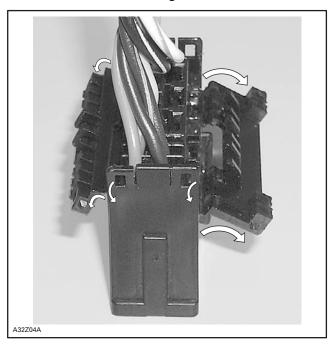
Receptacle connectors can be removed from female housing with sharp head pin.



FEMALE CONNECTOR HOUSING — CUT-AWAY

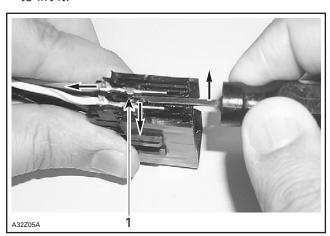
- Sharp head pin
 Lock

Male Connector Housing



To remove:

- Insert tool AMP-755430-2 under lock and twist to lift it.



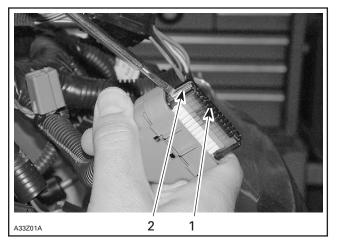
MALE CONNECTOR HOUSING — CUT-AWAY 1. Lock

09-01-7 MMR2003_045_09_01A.FM

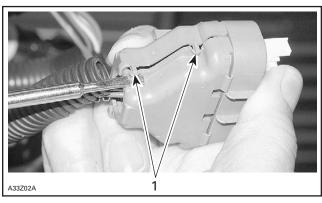
Subsection 01 (WIRING DIAGRAMS)

24-Circuit Connector Housing

Push on both tabs to remove retainer.

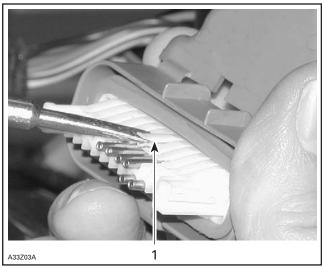


- Retainer
 Tab (one on each side)
- Open housing by lifting 4 tabs.



1. Tabs (2 on each side)

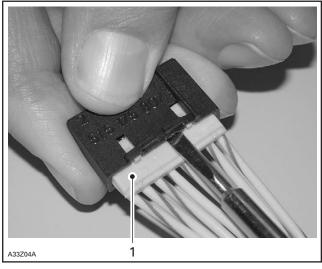
Lift plastic lock of the female terminal to be removed. Pull on the female terminal wire to remove female teminal from housing.



1. Plastic lock

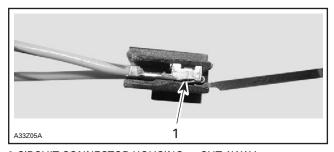
8-Circuit Connector Housing

Pry housing to release lock.



1. Lock

Insert tool AMP- 755430-2 under tab and pry it to free connector. Pull on the female terminal wire to remove female terminal from housing.

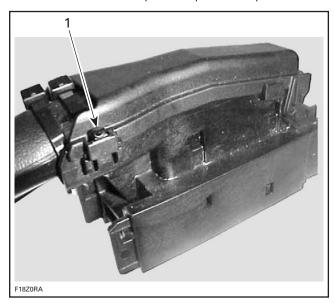


8-CIRCUIT CONNECTOR HOUSING - CUT-AWAY

1. Tab

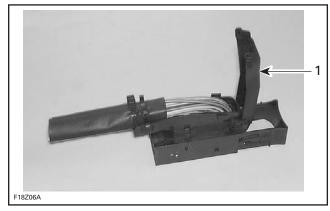
Connector housing A and B on ECM Terminal Removal

Unlock the connector housing cover by pushing in the tabs on top of the housing with a flat screwdriver to be able to flip the top cover up.



1. Push in tab

Lift the cover by pushing it forward.



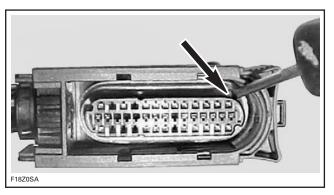
1. Cover

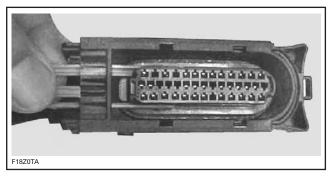
Cut both locking ties that secure the harness to the housing.



1. Locking ties

Turn the housing over and remove the lock by pushing and then pulling toward the wire harness.



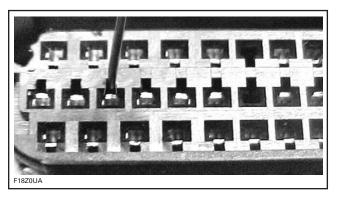


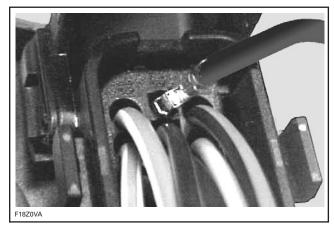
Use a 0.76 mm (.030 in) oxyacetylene torch tip cleaner or a no. 68 drill bit inserted down into the housing to release the locking tab on the connector.

CAUTION: Using a probe larger than 0.76 mm (.030 in) may damage the terminal.

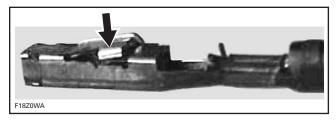
Subsection 01 (WIRING DIAGRAMS)

Insert the probe into the housing as shown, and locate the appropriate wire in the back of the housing. You may have to slightly cam the probe against the locking tab to release it, then remove the terminal from the housing.





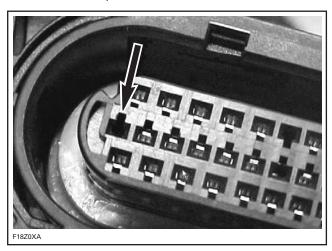
The locking tab on the connector may have to be bent out a little so it will lock in the housing when it's re-inserted.



If the wire is in good condition but the terminal is rusted or corroded, remove defective terminal and crimp a new one. If wire and terminal are defective, acquire a new genuine wire and new terminal and crimp them together as explained below.

IMPORTANT: Use genuine wires only. Otherwise wires will not fit properly.

When re-inserting the connector, the locking tab must be installed facing the smaller cutout of the connector cavity.

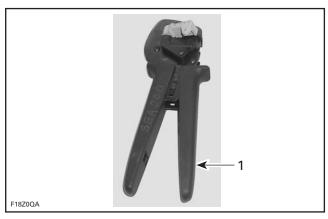


Insert the connector, ensuring the locking tab snaps into the housing.

Re-install the lock, attach the 2 tie raps, and close the housing cover.

Terminal Crimping

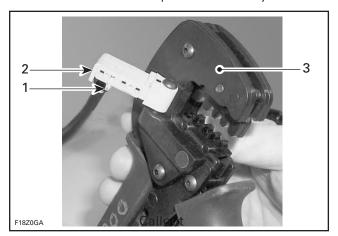
To crimp a new connector terminal, use the ECM connector crimping tool (P/N 529 035 905).



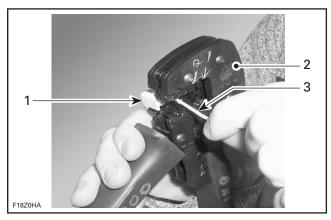
1. ECM crimping tool

09-01-10 MMR2003_045_09_01A.FM

Install the new terminal in the crimping tool swivel. Close the swivel in place. Place the wire on terminal barrel and crimp the wire firmly.



- New terminal
- Crimping tool swivel
- 3. Crimping tool

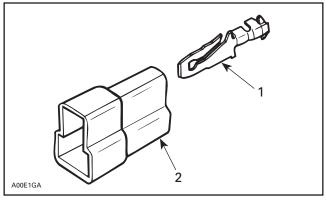


- Crimping tool swivel
- Crimping tool
 Wire

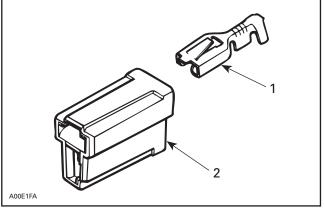
TAB AND RECEPTACLE **CONNECTORS INSTALLATION**

Prior to installing, make sure locking tab is sufficiently lifted to properly lock.

Insert tab and receptacle connectors in their respective housings as shown in following illustrations. Push sufficiently so that they snap. Try pulling wire to ensure they are properly locked.



Tab
 Housing



TYPICAL

- 1. Receptacle
- 2. Housing

⚠ WARNING

Keep wires away from any rotating, moving, heating, vibrating or sharp edge. Use proper fastening devices as required.

09-01-11 MMR2003_045_09_01A.FM

2003 4-TEC V-1000 MODELS ENGINE WIRING HARNESS

