

# TELORVEK EFI

# 4.6 Sequential Fuel Injection System (FT-95)

# WIRING INSTRUCTIONS

Thank you for purchasing the absolute finest of wiring kits for the Ford Motor Co. 4.6 94-95 Thunderbird, Cougar fuel injection engine. If you are using an engine out of the Lincoln Town Car you will need to change the computer to the 94-95 Thunderbird. We have taken considerable time to work out the circuitry so that you, the customer will understand at least some of what this is all about. We ask that you follow our instructions closely. You must use a high pressure in tank fuel pump. Custom installations are available from Tanks Inc. (320-558-6882) and Rock Valley (800-344-1934).

Should you eliminate any sensor, your injection system will not work at its peak and will probably be in some variation of back up mode. There are many factors that will help you get a trouble free start up that you must consider.

NOTE: FORD diagnostic procedures are very detailed, lengthy and impossible to cover in this set of instructions. Purchasing the FORD ENGINE/ EMISSIONS DIAGNOSIS shop manual will help you learn about the engine you installed and guide you through the correct diagnostic procedures Ford recommends. This book is available through your local Ford dealer or Helm Inc. Helm is the distributor for the shop manuals for General Motors and Ford Motor Company. Helm can be contacted at 800-782-4356 or on their web site www.helminc.com

#### STARTING INSTALLATION

Since there are so many individual circuits to complete, we recommend that you connect them in the order that we prescribe. Disconnect the battery before starting and do not reconnect until instructed.

There will be many connections to the TELORVEK panel so plan the location of the panel in an area with room to work. We suggest mounting the panel in an assessable location, in the trunk, under the seat or under the dash are good. In order to allow for the proper spacing between the computer and the Telorvek panel, plug the connector into the computer (ECM) and mount the panel and computer. For safety, disconnect the ECM connector until finished the installation. A poor installation will result in a poor running car. The number referred to from this point on will be the location on one of the terminal blocks located on the TELORVEK panel.

After all wires are connected to the engine, wire tie them together or use 3/4 inch Zip loom to protect them. This can be done before any connections are made to the panel. Since all wires are marked, running the entire group to the panel at one time is fine. Some terminals on the panel may not be used!

\*\*\*\*\*

**Important!** We have supplied three sizes of terminals for your use on the panels itself. The Yellow is for 10-12 gauge wire, Blue for 14-16 gauge wire and red for 18 gauge wire. Each individual bag instructions will be marked as to which terminal to use.

## NOTE SI

You will be moving around to different terminals on the TELORVEK panel to make connections. For this reason extra care is needed when making all connections to the panel.

Bag #60. INJECTORS: The injector wiring is made up in two harnesses, one for the left bank of injectors and one for the right bank. Locate the right injector connector with the Red and Tan wires and connect it to cylinder number (1) injector one. Now plug in the rest of the injector connectors (injectors 2, 3, 4) in that half of the harness. In the left injector harness locate the injector connector with the Red and Black wires and connect it to injector number (5). Plug in the rest of the injector connectors (injectors 6, 7, 8) and run all the wires from both haves of the harness to the Telorvek Panel. Using the blue terminals connect the Red wires (INJ 1->4) and (INJ 5->4) to #4. Now connect the remaining eight wires as follows using the red terminals, Tan (INJ 1->64) to #64, White (INJ 2->65) to #65, Brown (INJ 3->66) to #66, Lt Blue (INJ 4->67) to #67, Black (INJ 5->68) to #68, Lt Green (INJ 6->69) to #69, Dk Blue (INJ 7->70) to #70 and Dk Green (INJ 8->71) to #71.

Bag #61. IGNITION COIL: The 4.6 engine has two coil packs, one for the left spark plugs and one for the right spark plugs. The coil packs are mounted to each head in front of the engine. The left coil pack connector has Red, Tan and Lt Blue wires and the right coil pack connector has Red, White and Orange wires. After attaching the connectors to the coils run the wires back to the Telorvek panel. Connect the Red wire (LF IGN COIL->10) and (RT IGN COIL->10) using the blue terminals to #10. Using the red terminals connect the Tan (LF IGN COIL->12) to #12, Lt Blue (LF IGN COIL->13) to #13, White (RT IGN COIL->14) to #14 and the Orange wire (RT IGN COIL->15) to #15.

**Bag #62. IGNITION CONTROL MODULE CONNECTION:** The ICM requires some of the wires to be shielded from any electrical interference, that is why six of the wires (Pink, Gray, Purple, Dk Blue, Dk Green, Solid Strand) in the connector are wrapped.

Carefully uncoil the harness and plug it into the ICM then run all the wires to the Telorvek panel. Remove the tape and shielding material back only as far as it is necessary for the length of the wire to be cut and allowing enough wire to make the connections on the panel. In the shielded harness there is a solid strand wire with no insulation, install a blue terminal on it and connect it to #27. After the connection is made wrap the exposed wire from the shielded harness to #27 with electrical tape. Using red terminals the other five wires in the shielded harness are connected as follows, Pink (ICM 3->16) to #16, Gray (ICM 1->17) to #17, Purple (ICM 7->18) to #18, Dk Blue (ICM 5->19 to #19 and the Dk Green (ICM 4->20) to #20.

Connect the seven remaining wires running from the ICM connector as follows: Red (ICM 6->7) to #7, Purple (ICM 2->11) to #11, Tan (ICM 11->12) to #12, Lt Blue (ICM 12->13) to #13, White (ICM 8->14) to #14, Orange (ICM 9->15) to #15 and Black (ICM 10->24) to #24.

If desired a tach can be wired into the system by connecting the purple wire (11->TACH) to #11 on the panel and run it to the tach.

## **WARNING!!!**

The distributorless ignition system (DIS) on this engine is a high energy system operating in a dangerous voltage range which could prove to be fatal if exposed terminals or live parts are contacted. Use extreme caution when working on the vehicle with the ignition on or the engine running.

Bag #63 CRANK POSITION SENSOR (CPS): Requires the wires to be shielded from any electrical interference. Carefully uncoil the harness and plug it into the CPS located on the right front of the engine. Run the wires to the Telorvek panel. Remove the tape and shielding material back only as far as it is necessary for the length of the wire to be cut and allowing enough wire to make the connections on the panel. In the shielded harness there is a solid strand wire with no insulation, install a blue terminal on it and connect it to #27. After the connection is made wrap the exposed wire from the shielded harness to #27 with electrical tape. Connect the remaining two wires as follows: Dk Blue (CPS->19) to #19 and the Dk Green wire (CPS->20 to #20.

Bag #64. MASS AIR FLOW SENSOR: Attach the connector to the M.A.F sensor located in the air intake tube between the intake manifold and air cleaner. Using a blue terminal run the Red wire (MAF->7) to #7. Now using the red terminals run the Black (MAF->25) to #25, Tan (MAF->22) to #22 and the Lt Blue (MAF->21) to #21

Bag #65. CAM SHAFT SENSOR: Requires the wires to be shielded from any electrical interference. Carefully uncoil the harness and plug it into the sensor located on the left front of the engine. Run the wires to the Telorvek panel. Remove the tape and shielding material back only as far as it is necessary for the length of the wire to be cut and allowing enough wire to make the connections on the panel. In the shielded harness there is a solid strand wire with no insulation, install a blue terminal on it and connect it to #24. After the connection is made wrap the exposed wire from the shielded harness to #24 with electrical tape. Connect the remaining two wires as follows: Dk Blue (CAM SENSOR->23) to #23 and the Gray (CAM SENSOR->74) to #74.

Bag #66. ENGINE COOLANT TEMPERATURE SENSOR: After attaching the plug to the sensor located on the lower front of the engine, near the alternator run the two wires to the panel. Connect them using the red terminals, Lt Green wire (ECT->35) to #35 and the Gray wire (ECT->72) to #72.

Bag #67. THROTTLE POSITION SENSOR (TPS): Plug into the sensor located in the rear of the engine on the throttle body and run the wires back to the panel. Using the red terminals run the Brown (TPS->37) to #37, White (TPS->36) to #36 and Gray (TPS->72) to #72.

Bag #68. EXHAUST GAS RECIRCULATION VALVE POSITION SENSOR & EGR SOLENOID: Plug in the connector to the EGRVP located on the rear of the engine. Using red terminals run the Lt Green wire (EGRVP->38) to #38, Brown wire (EGRVP->37) to #37 and the Gray (EGRVP->73) to #73.

Plug the connector into the EGR solenoid located on the rear of the engine. Using a the red terminals run the Red wire (EGR SOL->5) to **#5** and the Brown wire (EGR SOL->39) to **#39**.

**Bag #69. INTAKE AIR TEMPERATURE SENSOR (IAT):** Plug the connector onto the IAT sensor located in the air intake tube. Run the wires to the Telorvek Panel and using the red terminals connect the Yellow wire (IAT->40) to **#40** and the Gray wire (IAT->74) to **#74**.

**Bag #70. OXYGEN SENSOR (4):** This area of the vehicle is hot so keep the wires away from the exhaust. Four sensors are required per engine. **NOTE:** If you are using headers, two of the O2 sensors should be mounted in the collectors and the other two in the exhaust pipes. Mount the heated O2 sensors in the exhaust as follows:

- O2 #1: Mounts in the right exhaust manifold or header collector.
- O2 #2: Mounts in the left exhaust manifold or header collector.
- O2 #3: Mounts in the right exhaust pipe.
- O2 #4: Mounts in the left exhaust pipe.

The O2 sensors must reach a certain temperature before they will produce a signal.

Plug in the connectors into the O2 sensors following the wording printed on the wires and run the wires to the Telorvek panel. Using the blue terminals connect the Orange wires (02 1->8) and (O2 2->8) to #8 and the Orange wires (O2 3->9) and (O2 4->9) wires to #9. Connect the Gray wires from the sensors (O2 1->76),(O2 2->76) to #76 and the Gray wires (O2 3->77), (O2 4->77) to #77. Now using the red terminals connect the Light Blue (O2 1->41) to #41, White (O2 1->42) to #42, Yellow (O2 2->44) to #44, Dark Blue (O2 2->43) to #43, Light Green (O2 3->45) to #45, Black (O2 3->46) to #46, Tan (O2 4->48) to #48 and Pink (O2 4->47) to #47.

**Bag #71. IDLE SPEED CONTROL:** The ISC is located on the rear of the engine in the throttle body. Plug in the connector and run the wires back to the panel. Using the red terminals, connect the White wire (ISC->56) to **#56** and the Red wire (IAC->6) to **#6**.

Bag #72. DATA LINK CONNECTOR: Mount the connector inside the vehicle under the dash and run the wires to the Telorvek Panel. Using the red terminals connect the Yellow (DLC 16->97) to #97, Purple (DLC 13->54) to #54, Pink (DLC 10->52) to #52, Black (DLC 5->26) to #26, Black (DLC 4->26) to #26 and the Light Blue (DLC 2->53) to #53.

The remaining Lt Green & Red wires are for the dash mounted service engine soon (S.E.S) light. The light must be a two wire un-grounded light. Connect the Lt Green wire (55->SES LT) to #55 on the Telorvek Panel and run it to a dash indicator light and connect it to one of the wires running from the light. The red wire (92->SES LT) connects to #92 on the panel and run to the other wire running from the light. This light is not required as the yellow light on top of the Telorvek Panel has the same function.

Bag #73 OCTANE ADJUST: The ECM measures voltage across the octane adjust connector and uses this information to modify ignition spark advance. Leave this connector plugged together but if you experience detonation while driving, un-plug this connector or use higher octane gasoline. Using the red terminals connect the Gray (OCTA ADJ->78) to #78 and the Dk Green (OCTA ADJ->57) to #57.

#### Bag #74 NOT USED

**Bag #75 RADIATOR COOLING FAN:** Mounted in the cover of the Telorvek panel is the cooling fan relay connector. This connector is the second connector down from the top. You must install a GM relay (part #14100455) into the connector or the electric cooling fan WILL NOT operate.

Connect the Brown wire (102->COOLING FAN) to #102 on the panel and connect it to the electric cooling fan positive terminal. A ground wire must be added to the negative terminal on the fan and run to a good ground.

Fan relay socket requires Airtex part number 1R1061 or Standard Motor Products RY116 or our part number HR-3.

Bag #76 FUEL PUMP & INERTIA SWITCH: We have included the wiring necessary for the Ford inertia switch. The inertia switch cuts off the electric fuel pump in the advent of an accident. Mount the inertia switch in the rear of the vehicle in a dry area. Using the blue terminals, plug in the connector to the inertia switch and run the Tan wire (INERTIA SW->104) to #104 on the Telorvek panel. Run the other Tan wire (INERTIA SW->PUMP) to the electric fuel pump. Hook the wire to the positive terminal on the pump. From the negative terminal on the pump connect a wire and run it to a good ground.

Fuel pump relay socket requires Airtex part number 1R1061 or Standard Motor Products RY116 or our part number HR-3.

**NOTE:** The inertia switch (Ford part #F2AZ-9341-A) has a red button on top of it that must be set (pushed down) in order for the fuel pump to operate. If the pump fails to operate check the inertia switch making sure the red button is in the down position.

#### NOTE!

If you plan to have the ECM control your fan you must use the FORD electric radiator cooling fan (Ford Part #F4SZ-8C607-D) which are designed to run at different speeds. Failure to use the correct Ford parts will cause damage to the motor.

Bag #77. VEHICLE SPEED SENSOR: Install the connector onto the speed sensor located in the speedometer assembly on the transmission and run the wires back to the Telorvek panel. Using the red terminals connect the Gray wire (VEH SPD SEN->50) to #50 and the Black wire (VEH SPD SEN->25) to #25

Electronic speedometers can be connected to terminal **#50** to pick up the VSS signal. This is a standard Ford 8000 pulse per mile signal.

Bag #78. TRANSMISSION SPEED SENSOR: The transmission speed sensor is located on the left front of the transmission case. This sensor combined with other sensors inputs determine proper shift points and torque converter lock-up. After plugging in the connector run the wires back to the panel. Connect the White wire (TRANS SPD SEN->51 to #51 and the Gray wire (TRANS SPD SEN->78) to #78.

# **4R70W Electronic Controlled Overdrive Transmission Wiring**

(Bags #79, #80, #81)

Bag #79 4R70W TRANSMISSION CONNECTIONS: The 4R70W transmission is a electronically controlled four speed automatic transmission. Plug the connector into the transmission and run the wires to the Telorvek panel. Using the red terminals, connect the Yellow wire (TRANS 1->83) to #83, Dark Blue (TRANS 3->81) to #81, Orange (TRANS 5->80 to #80, Black (TRANS 6->84) to #84 and the White (TRANS 10->82 to #82. Using blue terminals, connect the Red (TRANS 2->93) to #93, Red (TRANS 7->93) to #93, Red (TRANS 8->94) to #94 and the Gray (TRANS 9->79) to #79.

The Purple wire (118->BRAKE SW) connects to #118 and runs to the cold side of the brake light switch. This wire should only have 12 volts with the brake pedal depressed.

Bag #80 MANUAL LEVER POSITION SWITCH (MLPS): The manual lever position switch is located on the left hand side of the transmission. The MLPS controls neutral safety, back-up and lever position functions. We have included wires in the MLPS connector to allow you to get full use out of the switch. Connect the circuits in the switch as follows:

**NEUTRAL** / **SAFETY**: The heavier gauge Lt Blue (MLPS->IGN SW) and the Purple (MLPS->START SOL) wires are for the neutral safety circuit. Locate the wire that runs from the ignition switch to the starter solenoid. Cut the wire and connect the Lt Blue wire (MLPS->IGN SW) to the wire running from the ignition switch and the Purple wire (MLPS->START SOL) to the wire running from the starter solenoid. **NOTE**: If you are wiring this circuit with a Ron Francis Wire Works wiring kits, these wires will be a color for color match.

**BACK-UP LIGHTS:** Connect the Dk Green wire (BACK UP LT FEED) to a 12 volt ignition source. This wire should have 12 volts only with the key in the run position. Run the other Dk Green wire (MLPS->BACK UP LT) to the rear of the vehicle and connect it to both back-up lights. The lights must be grounded.

**LEVER POSITION CIRCUIT:** Run the Yellow and Gray wires to the Telorvek panel. Using the red terminals, connect the Yellow wire (MLPS->115) to **#115** and the Gray wire (MLPS->79) to **#79**.

Bag #81 TRANSMISSION CONTROL SWITCH (TCS) & TRANSMISSION CONTROL INDICATOR LIGHT (TCIL): The ECM has the capability to lock-out fourth gear of the transmission with a push of a button. Pushing the momentary contact switch button will light the TCIL and lock-out fourth gear in the transmission for city driving. Pushing the button again will turn the TCIL off and release the lock-out allowing the transmission to shift into fourth gear for highway driving.

Mount a momentary contact switch in dash or near the shifter lever. Using the red terminals, connect the Red wire (91->TCS) to **#91** and the Tan wire (117->TCS) to **#117** and run both wires to the TCS switch. You may connect the wires to either terminal on the switch.

The TCIL light must be a two wire un-grounded light. Mount the light in the dash where it is visible while driving. Using the red terminals, connect the White wire (116->TCIL) to #116 and the Red wire (92->TCIL) to #92 and run both wires to the TCIL light and make the connections.

NOTE: If you have decided to run a manual or another type transmission, trouble codes pertaining to the electronic transmission will set and store in the ECM. Wiring bags #78, #79, #80 and #81 will not be used. For a trouble free fuel injection installation, The Detail Zone strongly recommends using the 4.6 engine and 4R70W transmission together, the way "FORD" intended.

**Bag #82. CANISTER PURGE SOLENOID:** Plug the connector into the Canister Purge Solenoid. Using a using red terminals, connect the Red wire (CAN PURGE->5) to **#5** and the Gray wire (CAN PURGE->49) to **#49**.

#### **FINISHING UP**

Connect the large pre-wired **orange** wire to the ignition circuit of your ignition switch. This is an ignition feed that is controlled by the ignition switch. This is not an accessory feed and must remain hot even when the engine is cranking.

Connect the large pre-wired **red** battery feed wire to a battery feed. This is a battery feed that must remain hot even with the key off. Make sure this is a good connection. If you have a Master Disconnect switch, install this wire on the battery side of the switch so it will remain hot with the Disconnect off.

The **black** ground wire from the TELORVEK Panel runs direct to the battery. Run the battery ground directly to the engine not the frame first. This includes rear mounted batteries.

#### STARTING THE ENGINE

You have now made all of the connections necessary to TRY to start your car. If you try now, you will be disappointed since you did not hook up the battery. You can do so now.

### **Priming the Fuel System**

The fuel system can be primed by removing the Tan wire (INERTIA->104) from terminal #104 and applying 12 volts to this wire. After the fuel system is primed, be sure to re-install the Tan wire back onto terminal #104.

# CARE SHOULD BE TAKEN TO AVOID ANY SPILLAGE OR INJURY WHILE FOLLOWING THIS PROCEDURE.

# We're trying...

Ron Francis Wiring has made every effort to assure a quality product and can assure you that this system works well in your application. Most of the 'problem' calls we have had to date are basic trouble shooting questions which have nothing to do with the TELORVEK system we sold you.

We are committed to offering the most user friendly wiring systems available and support this with many years experience in the wiring and fuel injection fields. Please be certain that all connections are correct and tests run before calling. Your unit can be tested at any Ford Motor Company Dealership with no difficulty.

#### **USING THE CHECK ENGINE LIGHT**

The check engine light performs just the same as it would in any newer car, when the key is turned on (engine not running) the light will stay on until the engine starts.

When the check engine light comes on during engine operation, it is an indication of a fault in the system. A scan tool is necessary to access the engine computer to locate the fault in the system. This service can be performed at your local Ford dealer or repair facility.

#### **Breakout Box Circuit Diagnosis**

The Telorvek panel can be used as a BREAKOUT BOX for testing circuits running to and from the EEC Processor. Listed below is the Ford circuit number, circuit description, E.E.C processor pin number, Telorvek panel number the circuit runs to, Ford wire color and the color of wire we used. Following the diagnostic procedures that can be found in the ENGINE / EMISSIONS DIAGNOSIS SHOP MANUAL that can be purchased at your local Ford dealer all trouble codes can be diagnosed.

Circuit	Description	EEC pin#	Panel #	Ford Color	TDZ Color
361	Ign, Lf/Rt Injectors		4	Red	Red
361	Ign, Can Purge, EGR Sol	71,97	5	Red	Red
361	Ign, IAC		6	Red	Red
361	Ign, ICM, MAF		7	Red	Red
361	Ign, O2 1,O2 2		8	Red	Orange
361	Ign, O2 3,O2 4		9	Red	Orange
16	Ign, LF, RT coil		10	Red/Lt Green	Red
659	ICM 2	48	11	Orange/Yellow	Purple
97	LF ign coil,ICM 11		12	Tan/Lt Green	Tan
98	LF ign coil,ICM 12		13	Tan/Lt Blue	Lt Blue
95	RT ign coil, ICM 8		14	Tan/White	White
96	RT ign coil, ICM 9		15	Tan/Orange	Orange
929	ICM 3	50	16	Pink	Pink
395	ICM 1	49	17	Gray/Orange	Gray
259	ICM 7	23	18	Orange/Red	Purple
349	ICM 5,CKP Sensor		19	Dk Blue	Dk Blue
350	ICM 4,CKP Sensor		20	Gray	Dk Green
967	MAF	88	21	Lt Blue/Red	Lt Blue
968	MAF	36	22	Tan/LT Blue	Tan
282	Cam Shaft Sensor	85	23	Dk Blue/Orange	Dk Blue
570	ICM 10,Shield		24	Black/White	Black
570	MAF,VSS	33,25	25	Black/White	Black
681,57	DLC 12,13	24,76	26	Black	Black
48	ICM Shield	51,77	27	Black	Solid
570	Ground	103	28	Black	Black
439	A/C Heater	86	32	Tan/Lt Green	
883	A/C Heater	41	33	Pink/Lt Blue	
331	A/C Heater	69	34	Pink/Yellow	
354	ECT Sensor	38	35	Lt Green/Red	Lt Green
355	TPS	89	36	Gray/White	White
351	TPS,EGRVP	90	37	Brown/White	Brown
352	EGRVP	65	38	Brown/Lt Green	Lt Green
360	EGR	47	39	Brown/Pink	Brown
743	IAT	39	40	Gray	Yellow
74	O2 #1	60	41	Gray/Lt Blue	Lt Blue
387	O2 #1	93	42	Red/White	White
94	O2 #2	87	43	Red/Black	Dk Blue
388	O2 #2	94	44	Yellow/Lt Blue	Yellow
392	O2 #3	35	45	Red/Lt Green	Lt Green
389	O2 #3	95	46	White/Black	Black
393	O2 #4	61	47	Pink/Lt Green	Pink
390	O2 #4	96	48	Tan/Yellow	Tan
101	Canister Purge	67	49	Gray/Yellow	Gray
679	VSS	58	50	Gray/Black	Gray
970	Trans Speed Sensor	84	51	Dk Green/White	White
915	DLC 7	15	52	Pink/Lt Blue	Pink
914	DLC 15	16	53	Tan/Orange	Lt Blue
107	DLC 4	13	54	Pink	Purple
658	S.E.S Lt	2	55	Pink/Lt Green	Lt Green
264	IAC	83	56	White/Lt Blue	White
242	Octane Adjust	30	57	Dk Green	Dk Green

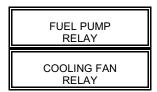
Circuit	Description	EEC pin#	Panel #	Ford Color	TDZ Color
555	Injector 1	75	64	Tan	Tan
556	Injector 2	101	65	White	White
557	Injector 3	74	66	Brown/Yellow	Brown
558	Injector 4	100	67	Brown/Lt Blue	Lt Blue
559	Injector 5	73	68	Tan/Black	Black
560	Injector 6	99	69	Lt Green/Orange	Lt Green
561	Injector 7	72	70	Tan/Red	Dk Blue
562	Injector 8	98	71	Lt Blue	Dk Green
359	ECT,TPS	91	72	Gray/Red	Gray
359	EGRVP	91	73	Gray/Red	Gray
359	IAT,Cam Shaft Pos.	91	74	Gray/Red	Gray
359	IAT, Cam Chait 1 05.	91	7 <del>-1</del> 75	Gray/rted	Gray
359	O2 #1,O2 #2	91	76	Gray/Red	Gray
359	O2 #1,O2 #2 O2 #3, O2 #4	91	70 77	Gray/Red Gray/Red	-
					Gray
359 359	Octane Adj, Trans Speed	91 91	78 79	Gray/Red	Gray
	MLPS,Trans 9			Gray/Red	Gray
923	Trans 5	37	80	Orange/Black	Orange
924	Trans 3	82	81	Brown/Orange	Dk Blue
925	Trans 10	81	82	White/Yellow	White
237	Trans 1	27	83	Orange/Yellow	Yellow
315	Trans 6	1	84	Pink/Orange	Black
361	Trans Control Sw		91	Red	Red
361	S.E.S LT,TCIL LT		92	Red	Red
361	Trans 2,7		93	Red	Red
361	Trans 8		94	Red	Red
37,38	IRCM 3,4		95	Black/Orange	Yellow
37	IRCM 8,10		96	Yellow	Yellow
175,37	IRCM 11,DLC 1	55	97	Black/Yellow	Yellow
16	IRCM 13		98	Red/Lt Green	Red
228	IRCM 1,2	4	99	Red/Orange	Lt Blue
228	Low Speed Cooling Fan		100	3.	Lt Blue
178	IRCM 6,7		101	Brown/Orange	Brown
178	High Speed Cooling Fan		102	Brown/Orange	Brown
787	IRCM 5	40	103	Pink/Black	Tan
787	To inertia sw/FP	. •	104	Pink/Black	Tan
926	IRCM 18	80	105	Lt Blue/Orange	Lt Blue
57	IRCM 15		106	Black	Black
197	IRCM 14	68	107	Tan/Orange	Tan
639	IRCM 17	17	108	Lt Green/Pink	Lt Green
331	IRCM 22	17	109	Pink/Yellow	Pink
347	IRCM 23		110	Black/Yellow	Yellow
883	IRCM 21		111	Pink/Lt Blue	Lt Blue
321	IRCM 16		112	Gray/White	White
361	IRCM 12,24		113	Red	Red
361	11.011 12,24		114	Red	reu 
199	MLPS	64	115	Lt Blue/Yellow	Yellow
911	TCIL	79	116	White/Lt Green	White
224	TCS	79 29	117		
				Tan/White	Tan
511 462	Brake Sw Input	92	118	Lt Green	Purple
462	Chimes	70	119	Purple	Purple

# **Fuse Designation & Size**

The harness has a total of eight fuses. Shown below is a diagram of what each fuse protects. The illustration is the front view of the Telorvek panel.

Fuse Block #1					
Fuse Designation	Fuse Size Block #1				
Left & Right Injectors	15 AMP				
Engine Control Module (ECM) Canister Purge & EGR Solenoids IAC,ICM, MAF	15 AMP				
Oxygen Sensors (4)	20 AMP				
Left & Right Ignition Coils	20 AMP				

Fuse Block #2					
Fuse Designation	Fuse Size Block #2				
Transmission Control Switch S.E.S, TCIL, Transmission	15 AMP				
Integrated Relay Control Module (IRCM)	20 AMP				
IRCM (Cooling Fan)	30 AMP				
IRCM (Fuel Pump), DLC, Engine Control Module (ECM)	20 AMP				



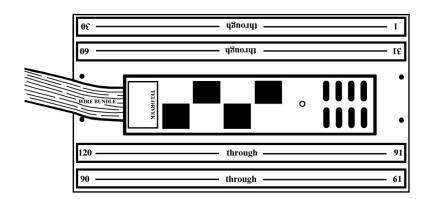
RELAY CENTER: In the cover of the TELORVEK panel are two relays the ECM uses to control fuel pump and the cooling fan. The ECM can not handle heavy load items and it requires a relay to handle the load and the ECM then controls the relay. The harness has a total of two relays. All the relays in the harness require Airtex part number 1R1061 or Standard Motor Products RY116 or our part number HR-3.

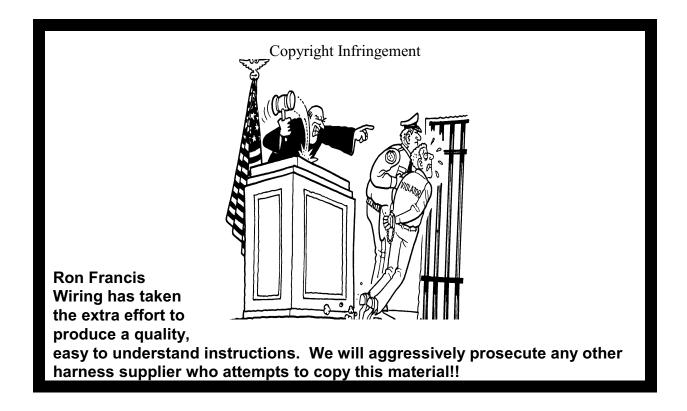
**WARNING:** The relays must be installed in the connectors for the fuel pump and cooling fan to function properly.

# Numbered terminal block cover strip reference.

The drawing below is for your reference on the correct positioning of the Telorvek fuel injection panel terminal block cover strips.

When connecting wires to the panel be sure the numbered terminals match the drawing below.





COPYRIGHT ©1994 RON FRANCIS WIRING