Thunderbird Ranch 7158 Hwy. B, Pittsville, WI 54466

Relay Replacement Installation Instructions
1960-1963 Thunderbird

**** Read all these instructions before doing anything on the car. Inspect the unit and the pictures that are with this instruction packet. Make sure everything matches and you understand all the items on the unit. If you have questions feel free to contact me at any point in the installation. I guarantee these units to work and will work with you to make sure you can install it correctly and get the top working with it.**

I recommend removing the rear seats from the car to do this properly

Lower top into trunk

Disconnect battery ground cable

Disconnect all wires from relays and move harness over to the right side out of the way

Remove old relays and brackets

Clean up any area you can access at this time before installing any new parts

Install new relay unit in car with the connection block on the passenger side. (1960 terminal block on driver's side) Do not fasten unit in place until you finish connecting all wires.

*Note... on the 1960, install with the relays towards the front of the car and the terminal block towards the rear of the car on the driver's side.

Connect the heavy power wire coming from the console area to terminal #17 on the strip.
1960... last one on left end of terminal block
1961-63... located on the far left end of the relay group

Hook up the black ground wire from the new unit to the car body by drilling a new hole and using the bolt provided

Strip the main loom covering insulation back, all the way over to the right hand roof cylinder area. Install a tie wrap on the loom at this point to keep the wires all together to prevent unraveling.

Cut off the 8 plugs that went to the old relays. Cut them close to the plug so as to save all the wire. Discard the plugs. Do not cut any other wires or plugs.

Ph. 715-884-6546 fax 715-884-6720 email jdrax@tds.net

Find the plug in the wire harness that connects to the pump motor. Unplug the pump. Do not cut the wires on the pump. Cut the plug and 6 inches of wire from the harness to connect back onto the pump plug. Install the eye connectors onto the red and yellow wires now and connect them to the large solenoid/relays on the driver's side of the unit. They are labeled for the red and the yellow wire.

Now lay the loom in place by the new relay unit. Straighten out all the wires so you can see what you have to work with. Do not cut anything until you are ready to make the connection. This way you can custom cut each wire go make the nicest looking installation. There are some multiple wires of the same color. Do not discard anything until you have the connections all made.

The wires that come from the console switch must stay connected to the plug in the harness. They do not get cut.

Retain the wires connected to the solenoid valves also.

All remaining wires can now be cut and installed into the proper connector on the connection block. Use the chart in the instructions to locate proper placement of the wires. Trim wires as needed to make them all lay nicely in place as you connect them to the terminal block

Once all wires have been connected as per chart, double check to make sure that you do not have any empty connectors. You may now cut and remove any excess or multiple wires. Clean up the area and install tie wraps on the loom to make the installation look neat.

I have pre-wired a cable and connector for a safety switch onto this unit. It is the extra coil of wire with the 2-wire plug on it. This can be strung up through the console or laid under the rear seat bottom so you can access it in case of emergency. It will operate the system in case of failure of the standard switch in the car. It is connected direct to the deck unlock relay so if you have any power to the trunk area at all it will unlock your deck. If you have a failure in one of your limit switches or the pump, then that is all it will do. If there is nothing wrong with the system in the trunk this switch will continue to operate the rest of the functions also. It is a very handy addition as you can operate your top from anywhere that those wires will reach. This will depend upon where you install the wiring.

Before operating any of the system, adjust all the limit switches by following the shop manual instructions. When you adjust the switches make sure you disconnect them from the wire harness by unplugging the wires to them. This is a must. You also have to use an ohmmeter or powered test light to check continuity across these switches. Any other way of adjusting them will not give correct results. If you do not adjust every one of these switches following the instructions exactly there is no guarantee this new relay system will function properly.

Ph. 715-884-6546 fax 715-884-6720 email jdrax@tds.net

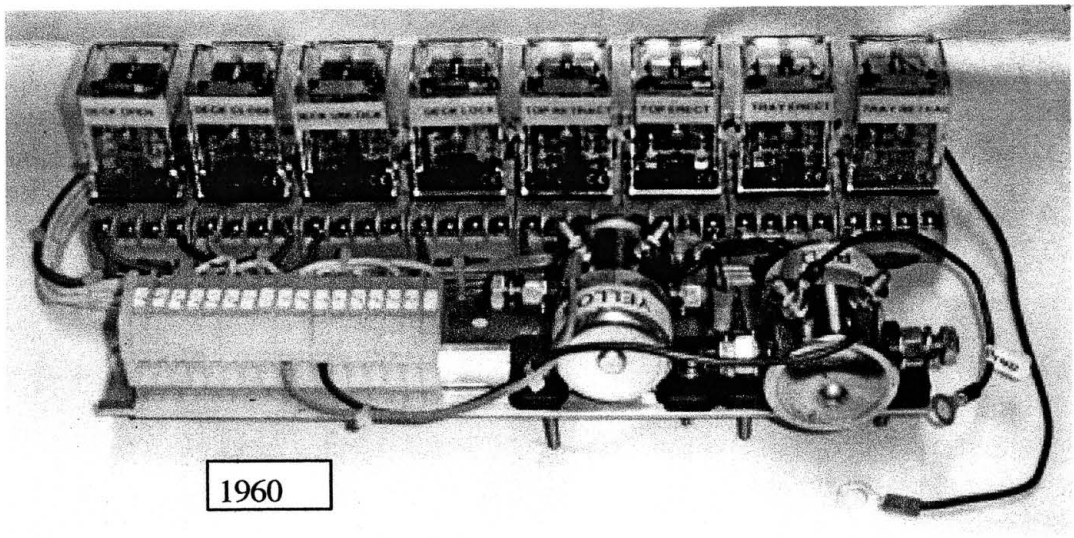
Thunderbird Ranch 7158 Hwy. B, Pittsville, WI 54466

Once this has been done you may test each function by pressing the blue button on the side of each relay. The relays are all identical however I have labeled them and numbered them as to which socket they go in and which function each one controls. Before operating the system from the switch up front in the car, make sure you have the top in the trunk, deck fully open and the tray fully extended. Keep in mind that the neutral safety switch also protects the top switch and the shift lever must be in the correct position for the top to function at all.

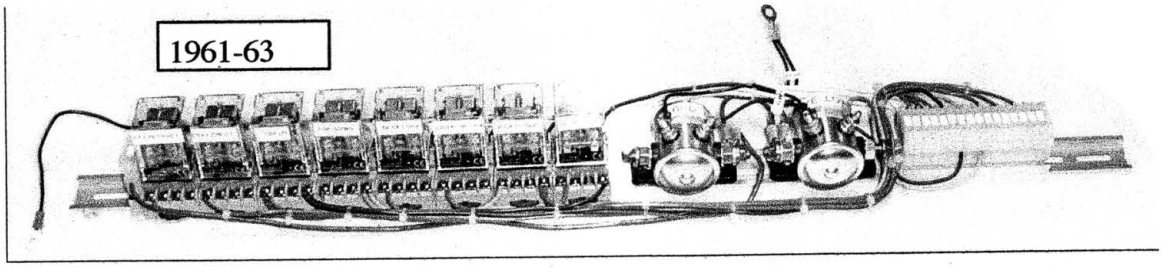
Once again I would like to thank you for your business.

I cannot stress enough the importance of adjusting the limit switches so if you are experiencing problems make sure you have done that step, maybe even a second time. If you have questions, problems or ideas, please contact me. If I do not answer the phone, leave a message and I will call you back. I know what it is like to be in the middle of a project like this and then get stuck and have no one to talk to. I will do my best to be prompt in helping with the installation and troubleshooting of your convertible problems.

John R. Draxler
Owner



1960



1961-63

Ph. 715-884-6546 fax 715-884-6720 email jdrax@tds.net

Thunderbird Ranch 7158 Hwy. B, Pittsville, WI 54466

Connector Terminal Usage		
1	R/W.....RED/WHITE	feed to tray retract relay
2	W-BL.....WHITE/BLUE STRIPE	power to tray retract motor
3	B-BL.....BLACK/BLUE STRIPE	feed to tray erect relay
4	BL-W.....BLUE/WHITE STRIPE	power to tray erect motor
5	G.....GREEN	feed to top up relay
6	W.....WHITE	power to top control solonoid valves
7	R.....RED FROM SOLONOID	power to pump motor solonoid red wire
8	Y-W.....YELLOW/WHITE STRIPE	feed to top down relay
9	Y.....YELLOW FROM SOLONOID	power to pump motor solonoid yellow wire
10	V.....VIOLET	feed to deck lock relay
11	Y-R.....YELLOW/RED STRIPE	power to deck lock motor
12	0.....ORANGE	feed to deck unlock relay
13	R-Y.....RED/YELLOW STRIPE	power to deck unlock motor
14	B-G.....BLACK/GREEN STRIPE	feed to deck close relay
15	BL.....BLUE	power to deck control solonoid valve
16	Y-V.....YELLOW/VIOLET STRIPE	feed to deck open relay
17	B.....BLACK MAIN HOT FEED WIRE	main power wire from front circuit breaker

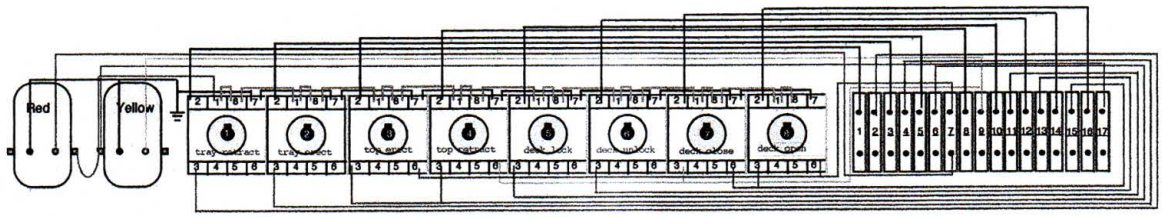
1960 Terminal connection and usage

Connector Terminal Usage		
1	R-W.....RED/WHITE STRIPE	feed to tray retract relay
2	W-BL.....WHITE/BLUE STRIPE	power to tray retract motor
3	B-BL.....BLACK/BLUE STRIPE	feed to tray erect relay
4	BL-W.....BLUE/WHITE STRIPE	power to tray erect motor
5	G.....GREEN	feed to top up relay
6	W.....WHITE	power to top control solonoid valves
7	R.....RED FROM SOLONOID	power to pump motor solonoid red wire
8	Y-W.....YELLOW/WHITE STRIPE	feed to top down relay
9	Y.....YELLOW FROM SOLONOID	power to pump motor solonoid yellow wire
10	V.....VIOLET	feed to deck lock relay
11	Y-R.....YELLOW/RED STRIPE	power to deck lock motor
12	0.....ORANGE	feed to deck unlock relay
13	R-Y.....RED/YELLOW STRIPE	power to deck unlock motor
14	B-G.....BLACK/GREEN STRIPE	feed to deck close relay
15	BL.....BLUE	power to deck control solonoid valve
16	Y-V.....YELLOW/VIOLET STRIPE	feed to deck open relay
17	B.....BLACK MAIN HOT FEED WIRE	main power wire from front circuit breaker

1961-63 Terminal connection and usage

Ph. 715-884-6546 fax 715-884-6720 email jdrax@tds.net

Thunderbird Ranch 7158 Hwy. B, Pittsville, WI 54466

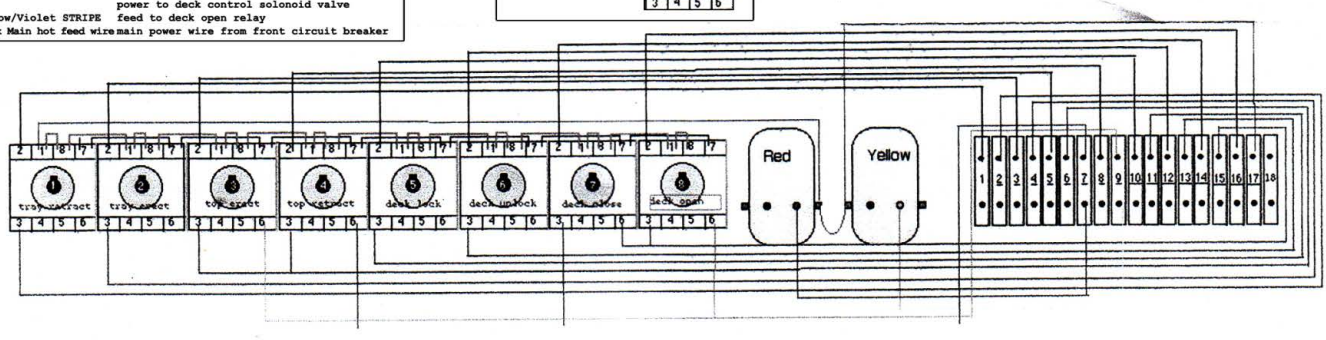


1961-1963 wiring

1960 Relay Replacement System for Thunderbird

Connector Terminal Usage			
1	R-W	Red/White STRIPE	feed to tray retract relay
2	W-BL	White/Blue STRIPE	power to tray retract motor
3	B-BL	Black/Blue STRIPE	feed to tray erect relay
4	BL-W	Blue/White STRIPE	power to tray erect motor
5	G	Green	feed to top up relay
6	W	White	power to top control solonoid valves
7	R	Red from solonoid	power to pump motor solonoid red wire
8	Y-W	Yellow/White STRIPE	feed to top down relay
9	Y	Yellow from SOLONOID	power to pump motor solonoid yellow wire
10	V	Violet	feed to deck lock relay
11	Y-R	Yellow/Red STRIPE	power to deck lock motor
12	O	Orange	feed to deck unlock relay
13	R-Y	Red/Yellow STRIPE	power to deck unlock motor
14	B-G	Black/Green STRIPE	feed to deck close relay
15	BL	Blue	power to deck control solonoid valve
16	Y-V	Yellow/Violet STRIPE	feed to deck open relay
17	B	Black Main hot feed wire	main power wire from front circuit breaker

Relay Terminal Usage	
1	Main Power in
2	Trigger wire
3	Power feed out
4	--not used--
5	--not used--
6	Power feed out for solonoids
7	Ground
8	Main Power in



Ph. 715-884-6546 fax 715-884-6720 email jdrax@tds.net