

Product Description

The 556U immobilizer interface module is used when installing remote start products in vehicles equipped with an RF (Radio Frequency) based immobilizer system. This type of system uses a small chip imbedded in the ignition key, called a transponder, to transmit a very low powered RF signal. This signal is picked up through an antenna (or coil) around the ignition switch which is then sent to the immobilizer's transceiver. Once the correct signal is received, the immobilizer will enable the ignition and/or fuel systems. If an attempt is made to start the vehicle and the transceiver does not receive a valid code, the ignition and sometimes the fuel systems are disabled. The immobilizer system will then render the remote start useless. The 556U bypasses the immobilizer system only while the remote start is in use, maintaining the factory system's integrity. When the remote start system is not in use the factory immobilizer remains fully functional.

6-Pin Harness

RED (+) 12 Volt Input: Connect this wire to a fused source of constant 12V.

BLUE (-) Status Input: Connect this wire to the remote start negative (-) status output.

PINK (+) Ignition Input: Connect this wire to the vehicle's true ignition output. (Refer to *Latching Input*, page 7.)

BLACK (-) Chassis Ground Input: Connect this wire to the vehicle's chassis ground.

VIOLET (+) Keysense Input: Connect this wire to the vehicle's positive keysense output wire. (Refer to *Key Sense Inputs*, page 7.)

GREEN (-) Keysense Input: Connect this wire to the vehicle's negative keysense output wire. (Refer to *Key Sense Inputs*, page 7.)

3-Pin Harness

BLACK and BLACK/RED Wires: Both of these are antenna ring wires.

BLACK/WHITE: Refer to alternate wiring diagram.

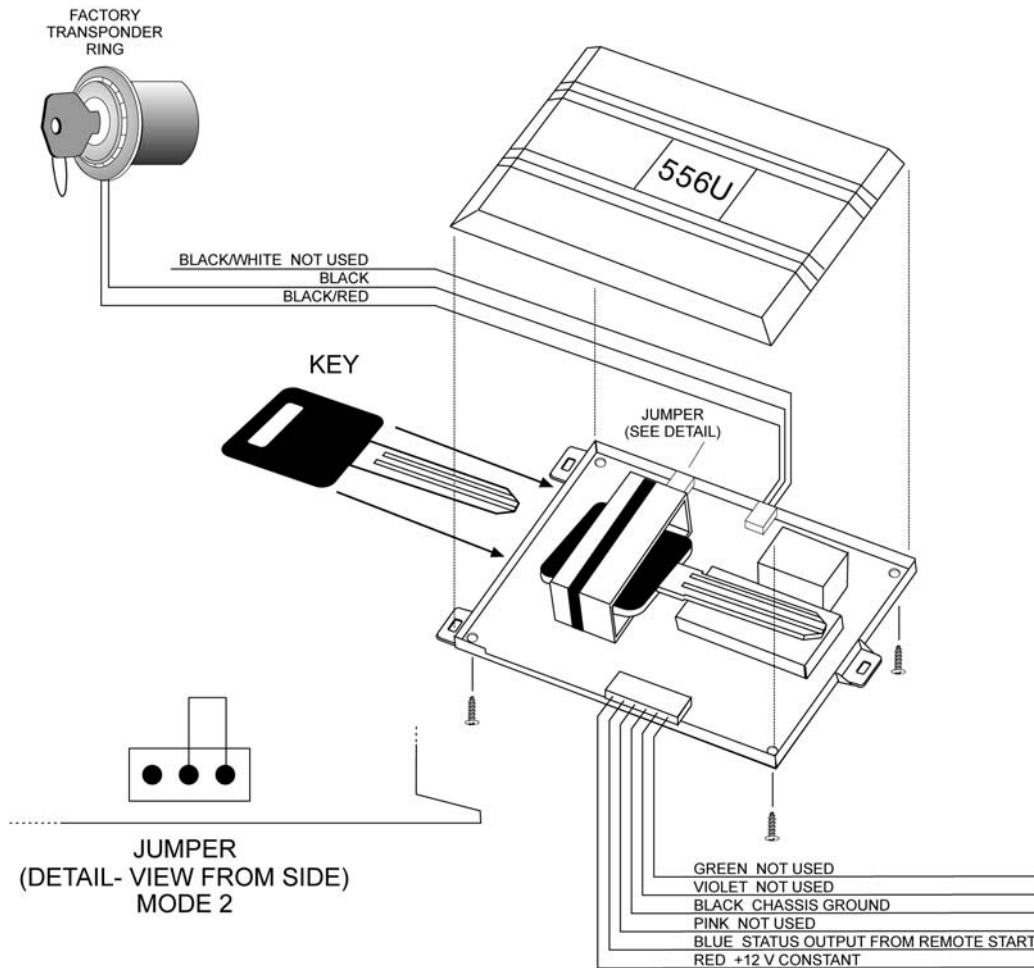
Immobilizer Interface Instructions

Please note that the instructions outlined in the *Standard Immobilizer Interface* section describe an immobilizer interface that will work with the majority of vehicles; however, some vehicle immobilizer systems may require an alternate interface due to mounting issues, cosmetic differences, or RF loss when coupling the factory key RF with the 556U to the factory transponder ring. (See *Alternate Immobilizer Interface*.)

IMPORTANT! *Before beginning the installation inform the customer that one of the vehicle's coded keys must be used in the installation and installed permanently in the unit. If a new key is being purchased through the dealer, make sure to code the new key to the factory immobilizer or have the dealer do this. In many vehicles, the new key must be coded at the dealer.*

IMPORTANT! *It is also the installer's responsibility to notify customers of the following: If they wish to have additional keys programmed to the vehicle's immobilizer system in the future, certain vehicle manufacturers require that all programmed keys be reprogrammed at the time that the keys being added to the system are programmed. In this case, it would be necessary to remove the already programmed key from the 556U module to reprogram it. (If the customer plans on having additional keys programmed to the vehicle in the future, the shaft of the key should not be altered.)*

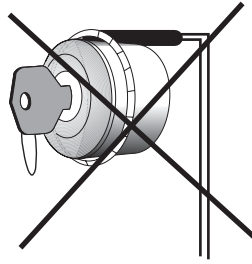
Standard Immobilizer Interface



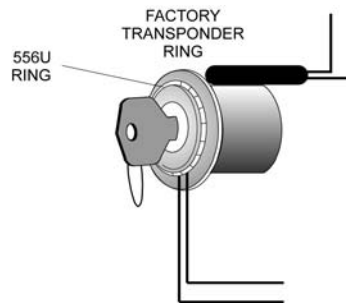
1. Open the control module and place the vehicle's coded key through the center of the black receiver ring as shown.
2. Reassemble the control module. This will secure the key inside.

IMPORTANT! When using the ring method of installing the 556U, the ring from the 556U **MUST** be in front of the factory receiver ring. It **CAN NOT** be on top of, or behind the factory receiver ring. See illustration below.

3. Disassemble the steering column shroud and place the antenna ring around the vehicle's ignition switch as shown, and plug into the control module.
4. Plug the 6-pin power plug into the control module.
5. Connect the BLACK wire to chassis (ground).
6. Connect the red wire to a fused source of constant 12V.
7. Connect the blue wire to the status output (blue wire) of the remote start system that provides a latched negative (-) ground while the remote start is active.
8. Test unit before reassembling the steering column.
9. Reassemble the steering column shroud.



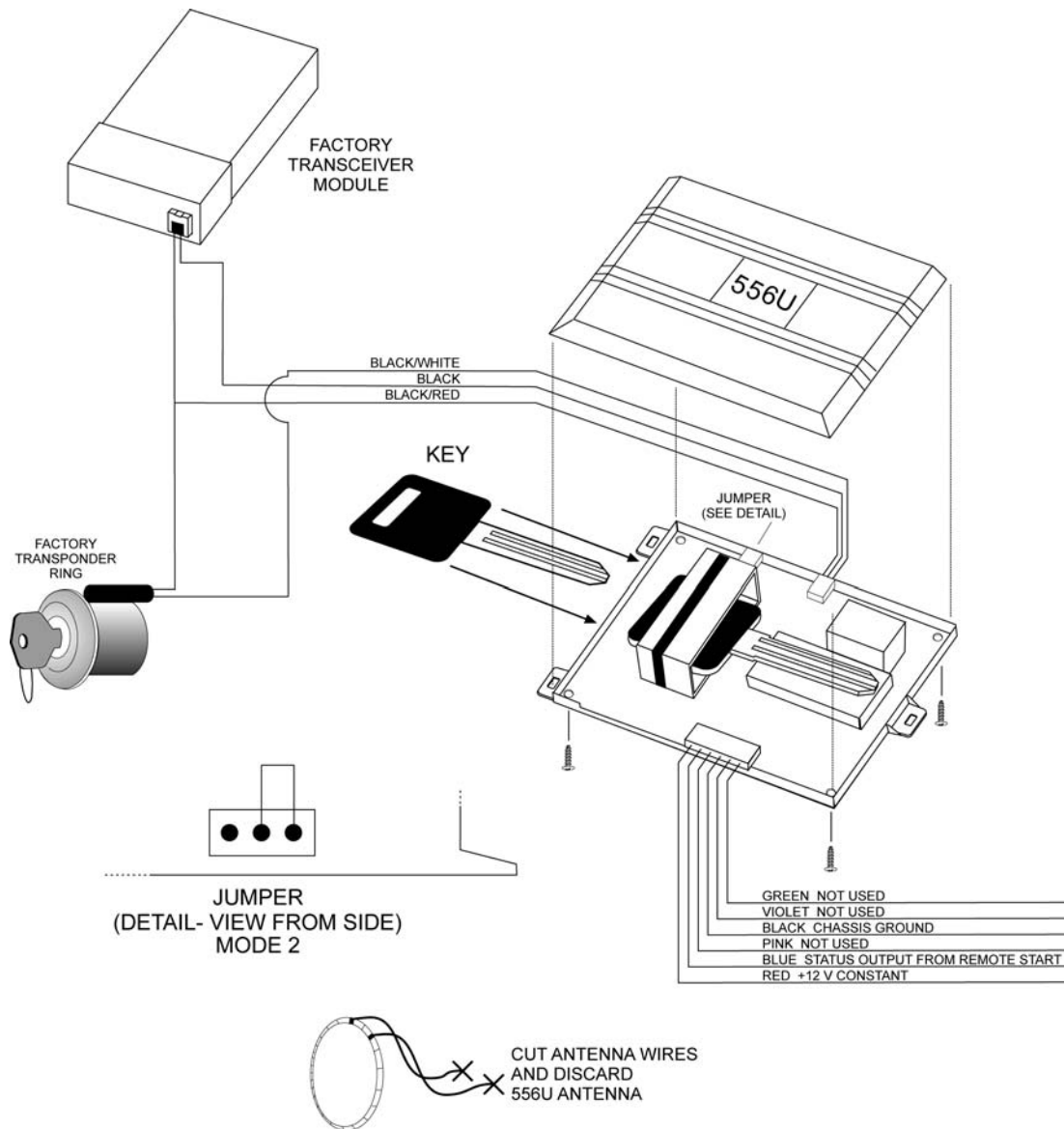
INCORRECT



CORRECT

Alternate Immobilizer Interface No. 1

This type of interface will only work with immobilizer systems that have a two-wire factory antenna harness. This alternate interface method is not guaranteed to work with all immobilizer systems, due to differences in transponder systems. It is meant to provide the installer with an alternative interface method for most two-wire transponder ring systems. **This method will not work on European vehicles.**



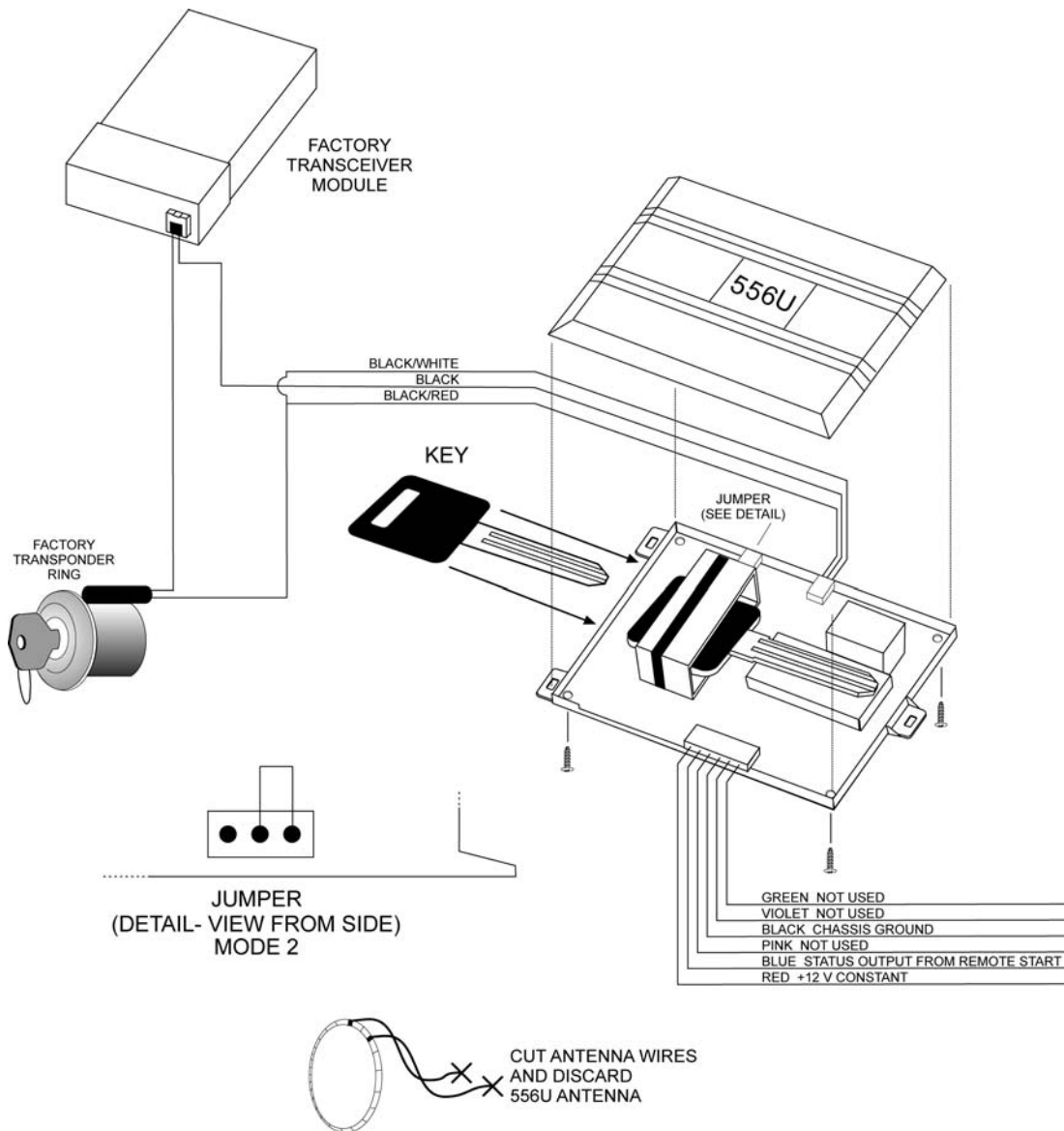
1. Open the control module and place the vehicle's coded key through the center of the black receiver ring as shown.
2. Reassemble the control module to secure the key inside.
3. Disassemble the steering column shroud and locate the factory transponder ring's antenna wires. The two wires are usually located in a tube routing from the transponder ring to the factory transceiver module.

NOTE: Some vehicles may require other methods to access the factory transponder ring antenna wires.

4. Plug the three-pin connector into the 556U module and cut the 556U's antenna wire off. Discard the antenna ring.
5. Split open the factory transponder ring tube and cut one of the two wires in half.
6. Connect the factory transponder ring side of the cut wire to the BLACK/WHITE normally closed input wire of the 556U.
7. Connect the factory transceiver module side of the cut wire to the 556U's BLACK wire.
8. Connect the BLACK/RED wire to the uncut factory transponder ring antenna wire.
9. Plug the 6-pin power plug into the control module.
10. Connect the BLACK wire to chassis ground.
11. Connect the RED wire to a fused source of constant 12V.
12. Connect the BLUE wire to the status output (blue wire) of the remote start system that provides a latched negative (-) ground while the remote start is active.
13. Test unit before reassembling the steering column.
14. Reassemble the steering column shroud.

Alternate Immobilizer Interface No. 2

This type of interface will only work with immobilizer systems that have a two-wire factory antenna harness. This alternate interface method is not guaranteed to work with all immobilizer systems, due to differences in transponder systems. It is meant to provide the installer with an alternative interface method for most two-wire transponder ring systems. **This method will work on European vehicles.**



1. Open the control module and place the vehicle's coded key through the center of the black receiver ring as shown.
2. Reassemble the control module to secure the key inside.
3. Disassemble the steering column shroud and locate the factory transponder ring's antenna wires. The two wires are usually located in a tube routing from the transponder ring to the factory transceiver module.

NOTE: Some vehicles may require other methods to access the factory transponder ring antenna wires.

4. Plug the three-pin connector into the 556U module and cut the 556U's antenna wire off. Discard the antenna ring.
5. Split open the factory transponder ring tube and cut one of the two wires in half.
6. Connect the factory transponder ring side of the cut wire to the BLACK/WHITE normally closed input wire of the 556U.
7. Connect the factory transceiver module side of the cut wire to the 556U's BLACK wire.
8. Connect the BLACK/RED and BLACK/WHITE wires to the factory transponder ring side of the cut wire.
9. Plug the 6-pin power plug into the control module.
10. Connect the BLACK wire to chassis ground.
11. Connect the RED wire to a fused source of constant 12V.
12. Connect the BLUE wire to the status output (blue wire) of the remote start system that provides a latched negative (-) ground while the remote start is active.
13. Test unit before reassembling the steering column.
14. Reassemble the steering column shroud.

Vehicle Applications

The 556U works with most RF based immobilizer systems. Refer to DirectWire for specific applications.

Jumper Settings

The 556U is shipped with the jumper set in a 60 winding position (mode 2). For most applications this should be the optimal setting. Moving the jumper will set the 556U to work off of a 18 winding position (mode 1). You may use the 18 winding for American and Asian vehicles, but for European vehicles the 60 winding setting is required. Mode 2 jumper position will be more sensitive to picking up the key vice mode 1 jumper position.

Key Sense Inputs

Some vehicles require the vehicle never "read" two keys at the same time (Ford Escape, Mazda Tribute). These vehicles require the key sense wire to be located in the vehicle. This wire will show either ground (-) or positive (+) voltage when the key is slid in the ignition and the key chime sounds. Depending on the polarity of the vehicle attach either the GREEN (-) or the VIOLET (+) wire from the 556U to the key sense wire in the vehicle. When the 556U senses an input on these wires it will drop out immediately allowing the vehicle to only see the key that was just placed in the ignition cylinder.

Latching Input

Some vehicles require that the key code does not change during a run cycle (Mercedes ML series). By attaching the PINK wire from the 556U to the ignition wire in the vehicle, the 556U will stay engaged the entire time the vehicle is running. This includes after the take-over with the key. With the PINK wire of the 556U attached to the ignition in the vehicle, the 556U will stay engaged until the vehicle is shut off.