DESCRIPTION: LONG RANGE PUSH START REMOTE ENGINE START SYSTEM IMPREZA / CROSSTREK

1 KIT CONTENTS

- Remote Engine Start Control Module (ECU) Quantity=1
- Pre-Arranged Jumper Wiring Harness Quantity=1
- Remote Engine Start Transmitters w/ Warning Tags Quantity=2
- Hood Safety Switch, Mounting Bracket & Mounting Bolt Quantity=1
- Under Hood Warning Label Quantity=1
- Quick Reference Card Quantity=1 English, 1 French
- ECU Foam Tape Quantity=1
- Tie Wraps 20cm Quantity=6 39cm Quantity=1
- Foam Tape Quantity=1

2 TOOLS REQUIRED

- Phillips Screwdriver Short and Standard
- Ratchet, 10mm Socket & Extension
- Torque Wrench
- Panel Removal Tool
- Wire Cutters
- Alcohol and Towel
- SSM IV (DST-i) Diagnostic Interface

3 MEANING OF CHARACTERS

- Remove
- Install
- Disconnect
- Connect
- Location of Clip or Screw
- Tighten Torque
- Loosen
- Discard
- Re-use

CAUTION: DO NOT SECURE ANY REMOTE START HARNESSES TO ANY YELLOW HARNESSES / CONNECTORS (AIRBAG SYSTEM) IN THE VEHICLE.
1. Using a 10mm socket/ratchet, disconnect the negative battery terminal. (FIGURE A)
   NOTE: Do not disconnect the battery cable from the battery post.

2. Open the glove box and press inward on the sides of the glove box to disengage the retaining tabs from the glove box inner cover. Disconnect the strut from the glove box. (FIGURE B)

3. Using a panel removal tool, carefully remove the right side dashboard panel by starting at the bottom access notch and working upward to disengage four (4) pressure clips. (FIGURE C)

4. Using a panel removal tool, carefully lift upward to disengage (4) pressure clips and one (1) finger clip and then pull rearward to remove the passenger’s side ornament panel. (FIGURE D)

5. Using a Phillips screwdriver, remove seven (7) Phillips screws securing the glove box inner cover. Disengage the six (6) pressure clips and disconnect the glove box lamp connector to remove the glove box inner cover. (FIGURE E)
5 REMOTE ENGINE START ECU MOUNTING

1. Locate the glove box inner cover and remote engine start ECU. Using alcohol, clean the back side of the glove box inner cover and ECU, as shown. (FIGURE F)

Using the supplied double sided tape, remove the three (3) small release liners and attach the tape to the glove box inner cover. Ensure the tape is positioned against the vertical character line and flat against the multi-level inner cover. Press firmly in place for at least 30 seconds. (FIGURE G)

NOTE: Ensure the double sided tape is positioned away from any obstructions on the glove box inner cover.

2. Remove the one (1) large release liner from the double sided tape and attach the remote engine start ECU. Ensure the corner of the ECU, closest to the small gray connector, is flush with the upper left corner of the tape, as shown. Press firmly in place for at least 30 seconds. (FIGURE H)

NOTE: Ensure the ECU connectors will be facing toward the passenger's side of the vehicle when the inner cover is replaced.

3. Using one (1) of the supplied 39cm tie wraps, secure the remote engine start ECU to the glove box inner cover. Trim off the excess tie wrap. (FIGURE I)
1. Locate and release the vehicle’s 8-pin and 2-pin pre-fit connectors secured to the vehicle’s wire harness with breakaway tape near the upper passenger’s side glove box area. (FIGURE J)

2. When the vehicle’s 8-pin and 2-pin pre-fit connectors are free from the breakaway tape, unplug and discard the 2-pin mating connector/wire jumper. (This is used for the power window interrupt circuit).

3. Plug the remote engine start pre-arranged jumper harness 8-pin and 2-pin connectors into the corresponding pre-fit connectors. (FIGURE K)

4. Secure the pre-arranged jumper harness to the vehicle’s wire harness using three (3) of the supplied 20cm tie wraps at the white tape rings. Trim off the excess tie wraps. (FIGURE L)

5. Plug the pre-arranged jumper harness 12-pin connector into the 12-pin white port on the remote engine start ECU, previously mounted to the back side of the glove box inner cover (Step 5).
7 PANEL RE-ASSEMBLY

1. Re-connect the glove box lamp connector to the lamp on the glove box inner cover. Re-install the glove box inner cover by engaging the six (6) pressure clips and secure with seven (7) Phillips screws.

2. Re-install the passenger’s side ornament panel by engaging the four (4) pressure clips and one (1) finger clip.

3. Re-install the right side dashboard panel by engaging the four (4) pressure clips.

4. Re-install the glove box and strut.

5. At the end of the installation, insert the Quick Reference Cards into the Owner’s Information Kit.

8 UNDER HOOD WARNING LABEL MOUNTING

1. Using alcohol, clean the top of the air intake plenum, near the radiator core support.

2. Remove the release liner from the under hood warning label and secure to the top of the air intake plenum, as shown. (FIGURE M)
9 HOOD SAFETY SWITCH MOUNTING

1. In the engine compartment, locate and release the 2-pin pre-fit hood safety switch connector secured to the vehicle’s wire harness with breakaway tape in front of the relay box on the passenger’s side of the vehicle. (FIGURE N)

2. When the 2-pin pre-fit hood safety switch connector is free from the breakaway tape, unplug and discard the 2-pin mating connector.

3. Locate the vehicle’s relay box mounted on the passenger’s side fender support. Using a panel removal tool, release the relay box retaining tabs and remove it from the bracket to provide access to the 10mm mounting bolt closest to the front of the vehicle. (FIGURE O)

4. Remove the 10mm bolt securing the relay box bracket, closest to the front of the vehicle and discard. Using the supplied foam tape, wrap the bottom of the relay box bracket. (FIGURE P)

   NOTE: The foam tape should be flush with the bottom edge of the relay box bracket.

5. Using a 10mm socket/ratchet, mount the hood safety switch bracket behind the relay box bracket using the supplied 10mm bolt. (FIGURE Q)

6. Ensure that the supporting tongue on the hood safety switch bracket is seated flat against the top of the fender support while tightening the 10mm bolt. (FIGURE R)

7. Using a 10mm socket/torque wrench, tighten the 10mm bolt to 10.8 Nm +/- 2 Nm (1.10 Kgf-m +/- 0.2 Kgf-m, 8 ft-lbs +/- 1.5 ft-lbs).
8. Securely mount (snap-in) the supplied hood safety switch into the bracket and plug the vehicle’s pre-fit 2-pin female hood switch connector into the base of the hood safety switch. (FIGURE S)

9. Using one (1) of the supplied 20cm tie wraps, secure the hood safety switch wire harness to the vehicle’s relay box bracket. Trim off the excess tie wrap. (FIGURE T)
10 SYSTEM POWER-UP

1. After all the connections are complete, re-connect the vehicle’s negative battery terminal. Using a 10mm socket/torque wrench, tighten the 10mm nut to 7.5 Nm +/- 2 Nm (0.76 Kgf-m +/- 0.2 Kgf-m, 5.5 ft-lbs +/- 1.5 ft-lbs).

2. Start the vehicle at least one (1) time using the Access key prior to activating the remote engine start system. This is required to allow the vehicle’s electronic systems to re-synchronize.

3. With the vehicle running via the Access key, verify that the instrument cluster airbag light turns off. If the airbag light remains on, refer to the vehicle service information for troubleshooting.

4. Refer to the vehicle Owner’s manual for the Power Window Reset Procedure to restore the power window functions.

11 SYSTEM REGISTRATION

DST-i SETUP

Plug the DST-i diagnostic plug into the vehicle’s diagnostic connector

With an Access key inside the vehicle, turn ON the ignition

Press and hold the DST-i “B” and “A” buttons simultaneously for approximately 5 seconds to enter stand alone mode

Using the arrows on the DST-i, select Diagnostic and Press “A” to proceed to Registration

REGISTRATION

Using the arrows on the DST-i, select “Name”

Using the arrows on the DST-i, select “Impreza”

Using the arrows on the DST-i, select “Model year”

Using the arrows on the DST-i, select the vehicle model year “XXMY”

Using the arrows on the DST-i, select “Immobilizer”

DST-i screen will display “Press YES if it is a smart system, otherwise press NO.”

Using the arrows on the DST-i, select “YES”

DST-i screen will display “Check if Ignition SW is turned ON.”

Using the arrows on the DST-i, select “YES”

DST-i screen will display “Successful [Remote Engine Start CM Registration] Press OK”

Registration Complete
1. REMOTE ENGINE START- Ensure the Access key is removed from the vehicle, the engine hood, all doors and trunk are closed. Press the START button on the remote start transmitter two (2) times within three (3) seconds. The vehicle’s parking lights should flash and the vehicle’s horn should honk one (1) time and then the vehicle should crank and start. Once started, the transmitter LED will flash two (2) times and the parking lights will turn on and stay on signifying the vehicle is running. The transmitter LED will flash one (1) time every three (3) seconds signifying the vehicle is still running.

2. SHUT DOWN WITH DOOR OPENING - While the vehicle is running by the remote engine start, wait at least five (5) seconds and then confirm that all functions (lock, unlock & trunk, but not panic) operate properly on the FACTORY transmitter. Once the FACTORY transmitter functionality is confirmed, press the UNLOCK button on the FACTORY transmitter and open any vehicle door. The remote engine start should shut down and the transmitter LED should flash three (3) times indicating the system has shut down.

3. ACTIVATION WITH DOOR OPEN - Ensure the Access key is removed from the vehicle and the engine hood and trunk are closed. Open the driver’s door and press the START button on the remote start transmitter two (2) times within three (3) seconds. The vehicle’s parking lights should flash and the vehicle’s horn should honk six (6) times. The vehicle should not start with any door or trunk opened.

4. BRAKE PEDAL SAFETY - While sitting in the vehicle with the engine hood, all doors and trunk closed, activate the remote engine start and press the brake pedal. The vehicle should shut off.

5. HOOD SAFETY SWITCH - Open the engine hood and activate the remote engine start. The vehicle’s parking lights should flash and the vehicle’s horn should honk two (2) times. The vehicle should not start since the hood safety switch is activated.

6. HEATER / AC FUNCTION - With the Access key inside the vehicle, press the start button on the dashboard two (2) times to turn ON the ignition. Preset the vehicle’s heater or air conditioning to the ON position. Press the start button on the dashboard one (1) time to turn OFF the ignition and remove the Access key from the vehicle. Activate the remote engine start and verify that the heater or air conditioning turns on to the preset setting for manual climate controlled vehicles or turns to the “Full Auto” setting for electronic climate control vehicles.

7. 15 MINUTE RUN TIME - Activate the remote engine start and allow the system to run for the 15 minute preset run time. The remote engine start should shut down after 15 minutes (+/- 10 seconds).

8. TRANSMITTER FUNCTIONALITY VERIFICATION - Activate the remote engine start using both of the supplied single button remote start transmitters.

FUNCTIONAL TESTING IS NOW COMPLETE.