Subaru Smart System
ESL reset
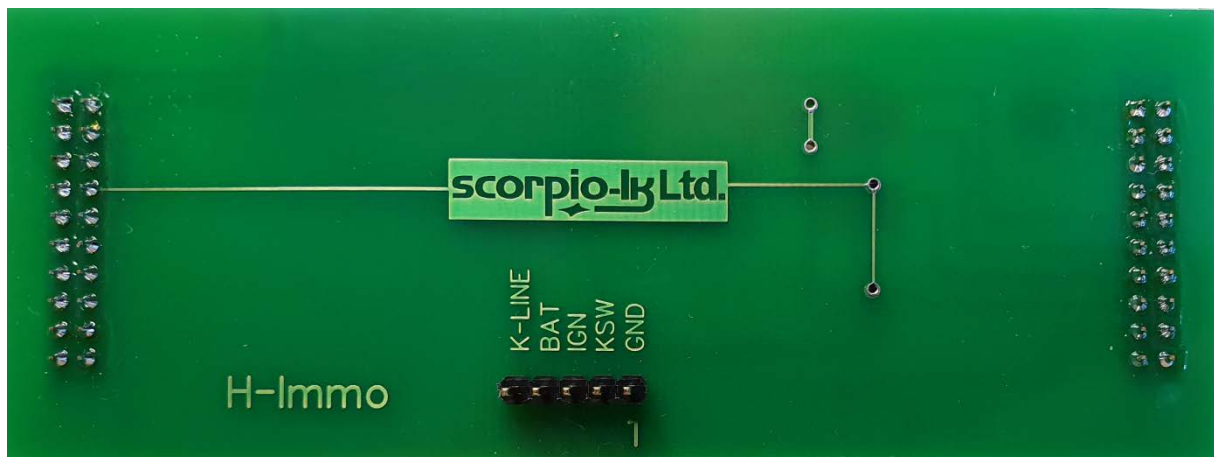
I. Getting Started

Introduction

The following documentation relates to Barracuda software version 20 (September 2021). The system allows to **reset** ESL (Electric Steering Lock) of Subaru smart system vehicles 2013+ (Page1: **F3** keys). Reset of ESL allows resynchronization via **Tango+ Subaru** or **SSM** thus solve all keys lost situation for these vehicles by replacing the Certification ECU (Smart box) with a new one that has at least one paired key. Alternatively a second hand Certification ECU that matches the type / part number and is pre 2017 (not locked, **P1 F3**) can be used in conjunction with Tango+ for Subaru SmartKey Systems OBD Framework to create an emulator on the bench and synchronize it with the reset ESL.

System requirements:

- Barracuda programmer
- Barracuda Adapter H-Immo
- Barracuda activation IDCode & ESL reset activation
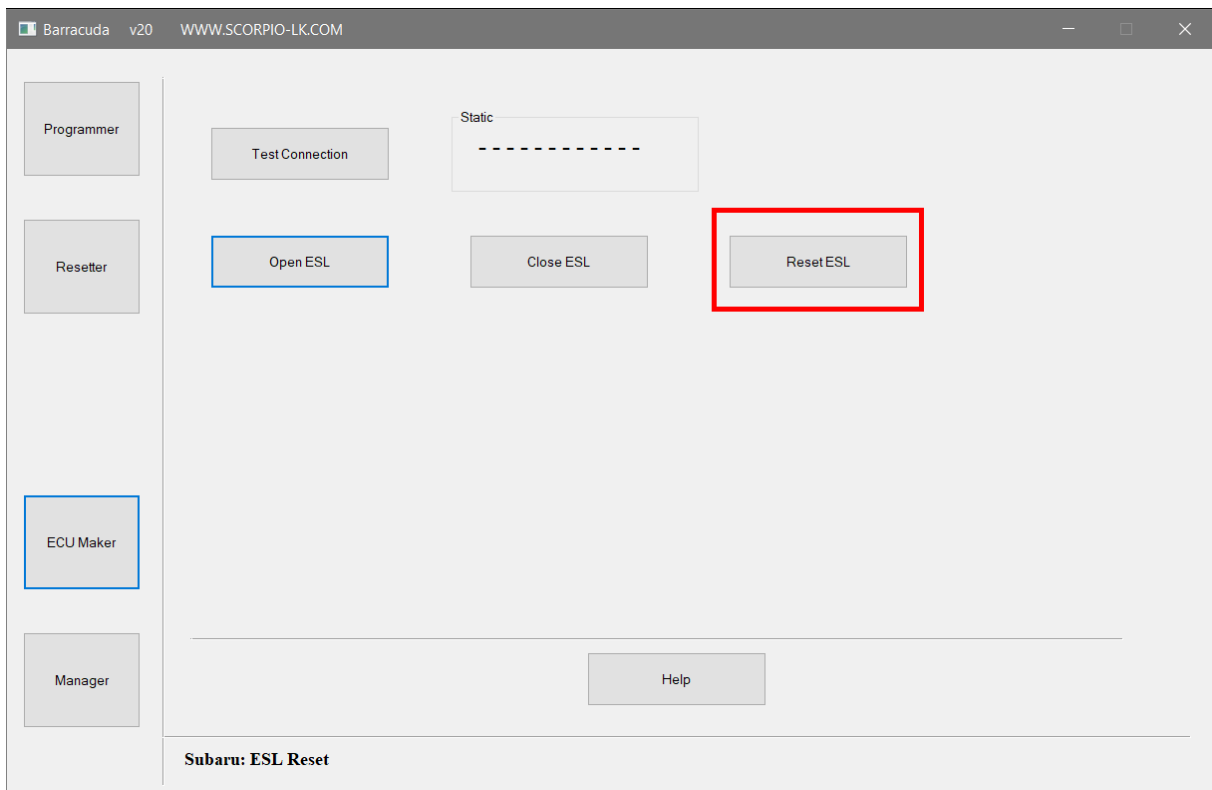
Barracuda Adapter H-Immo

II. Operation Procedure

Reset ESL

1. **Disconnect** vehicle's Certification ECU (Smart box)
2. Access the vehicle's ESL (Electric Steering Lock), disconnect its plug and connect as shown on the diagram
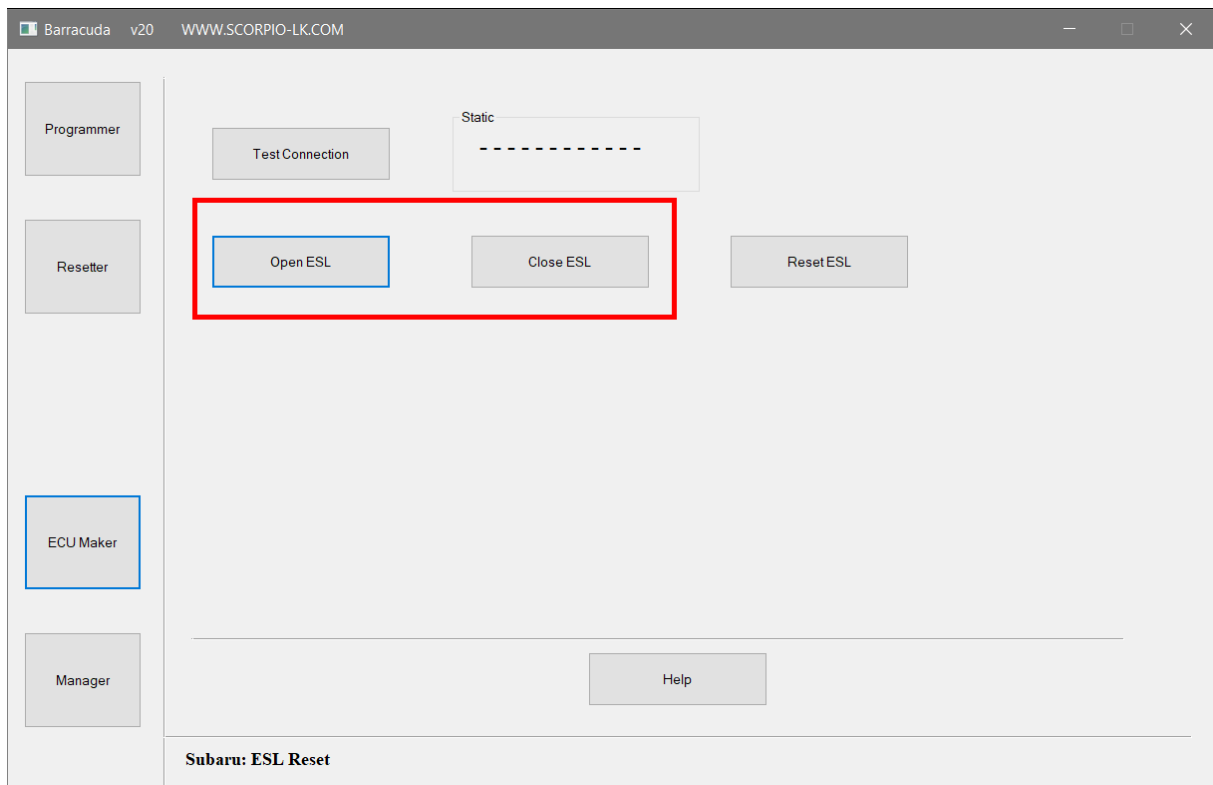
3. Start Barracuda software and select ECU Maker->Toyota->ID Code Reset

4. Press **Test Connection** to verify wiring then proceed with **Reset ESL**

Additional functions

Open ESL and **Close ESL** functions allow disengage/engage the steering lock

III. Addendum

Barracuda Power Supply

In order to operate Barracuda requires 9-24V DC supplied to its 5.5x2.1mm center positive plug. When working mobile this can be easily achieved by using a Step-UP (5 to 9/12/24V DC) connected to a power bank, laptop USB port or getting 12V DC from a vehicle's lighter or other power supply port.

Note that for this function in particular (**Open ESL** and **Close ESL**) power requirement is **12V 1A**, which rules out laptop/PC USB port as source.