



## SERVICE MANUAL

**Installation must be done by a professional.**

Read this manual prior to the installation.

Always have access to this manual as well as a factory service manual.

※ Make sure the vehicle is applicable to this kit.

NAME OF PRODUCT	VERSION UP KIT to GT S/C SYSTEM FR-S
PART NUMBER	12002-KK002
APPLICATION	12002-KK002 • SCION FR-S & SUBARU BRZ 2012~
ENGINE	FA20
REMARKS	<ul style="list-style-type: none"> <li>○ HKS will not be responsible for any and all damages to the vehicle's engine or other supplemental devices through the use of this product.</li> <li>○ This kit updates GT Supercharger Pro Kit (12001-AT009) to GT S/C SYSTEM Pro FR-S (12001-KT003).</li> <li>○ Fuel and Ignition settings are required. If neglected, the engine may be damaged.(12002-KK002)</li> </ul>

### REVISION OF MANUAL

Rev. Number	Date	Manual Number	Details
3-3.01	2015/8	E04215-A40040-00	1 <sup>st</sup> Edition

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## NOTICE

This manual assumes that you have and know how to use the tools and equipment necessary to safely perform service operations on your vehicle. This manual assumes that you are familiar with typical automotive systems and basic service and repair procedures. Do not attempt to carry out the operations shown in this manual unless these assumptions are correct. Always have access to a factory service manual. To avoid injury, follow the safety precautions contained in the factory service manual.

## ATTENTION

- This manual indicates items you need to pay attention to in order to install this product safely and lists precautions to avoid any possible damage and/or accidents.
- This product is an automobile part. Do not use for any other purposes.
- HKS will not be responsible for any damage caused by incorrect installation and/or use, or use after modification and/or dismantling of this product.
- This product was designed for installation on a specific factory vehicle.
- The specifications of this product are subject to change without notice.
- The instructions are subject to change without notice. Make sure to refer to the most recent instructions.

## SAFETY PRECAUTIONS

The following precautions for use of this product are to prevent possible accidents and/or injuries and for proper use.



**WARNING:** Indicates risk of serious injury and/or possible death.



**CAUTION:** Indicates risk of serious injury and/or possible property damage (i.e. vehicle damage as from use of this product.).

# PARTS LIST

NO.	DESCRIPTIONS	QT	REMARKS
1	Supercharger Adapter Pulley	1	
2	Supercharger Pulley	1	φ110mm-6PK
3	Bracket Supercharger No.1	1	Steel Plate
4	Bracket Supercharger No.2	1	Cast
5	Spacer Supercharger	2	φ 16-6 L36.2
6	Spacer Supercharger	1	φ 20-8 L52.3
7	Spacer Supercharger	1	φ 16-8 L82.8
8	Spacer Supercharger	1	φ 23-10 L10.6
9	V-Ribbed Belt	1	6PK2160
10	Suction Pipe	1	
11	Suction Pipe Gasket	1	
12	Hose 75 L60	1	
13	Cap Bolt M10 L50	1	
14	Cap Bolt M10 L45	1	
15	Cap Bolt M8 L125	1	
16	Cap Bolt M8 L115	1	
17	Cap Bolt M8 L90	1	
18	Cap Bolt M8 L20	6	
19	Cap Bolt M6 L55	2	
20	Cap Bolt M6 L18	2	
21	Flange Bolt M6 L18	3	
22	Low Head Cap Bolt M6 L12	5	
23	Installation Manual	1	For 12001-KT003
24	Operation Manual	1	For 12001-KT003
25	Installation Manual	1	This Manual

# 1. REMOVAL OF GT SUPERCHARGER

(1) Remove the supercharger from the vehicle, to replace the S/C Pulley.

The following items will be not reused later.

- Supercharger Bracket (Steel Cast)
- Supercharger Pulley (Steel, Center Bolt)
- V-ribbed Belt (6PK2125)
- Suction Pipe (Aluminum, Cast)

## NOTE

- ◇ Not need to remove the Intercooler and Traction fluid cooler.
- ◇ Plug the opening of the traction fluid pipe & hose to prevent a foreign object or dust from entering the pipe & hose.

## 2. PREPARATION FOR GT SUPERCHARGER INSTALLATION



CAUTION

- **Do not use an impact wrench to remove the 1-hole S/C Pulley center bolt to avoid damage to the traction drive system's components.**
- **The center bolt of the 5-hole flange is left-hand thread. Do not over-tighten the bolt to avoid damage to the bolt.**

(1) Wrap an old belt around the pulley. Secure the pulley by holding it with a vice or something similar.



(2) Loosen the center bolt of the 1-hole S/C Pulley.

**NOTE**

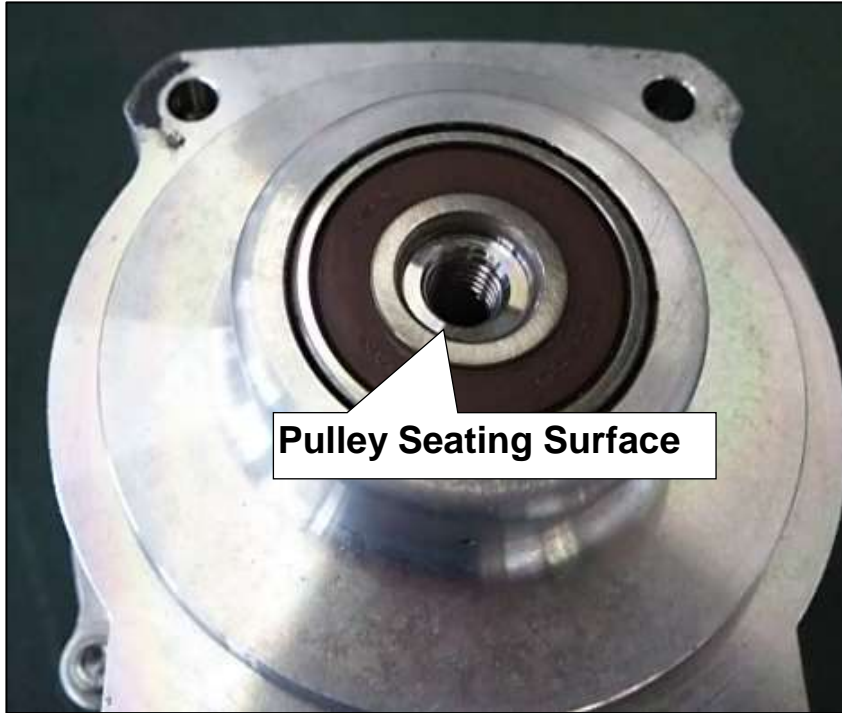
- ◇ Turn the bolt clockwise to loosen since the bolt is left-hand thread.

(3) Remove the GT Supercharger from the vice. Remove the 1-hole S/C Pulley.

**NOTE**

✧ Keep the center bolt for later use.

(4) Remove oil and/or dust and clean the pulley seating surface of both sides of the GT Supercharger and pulley.

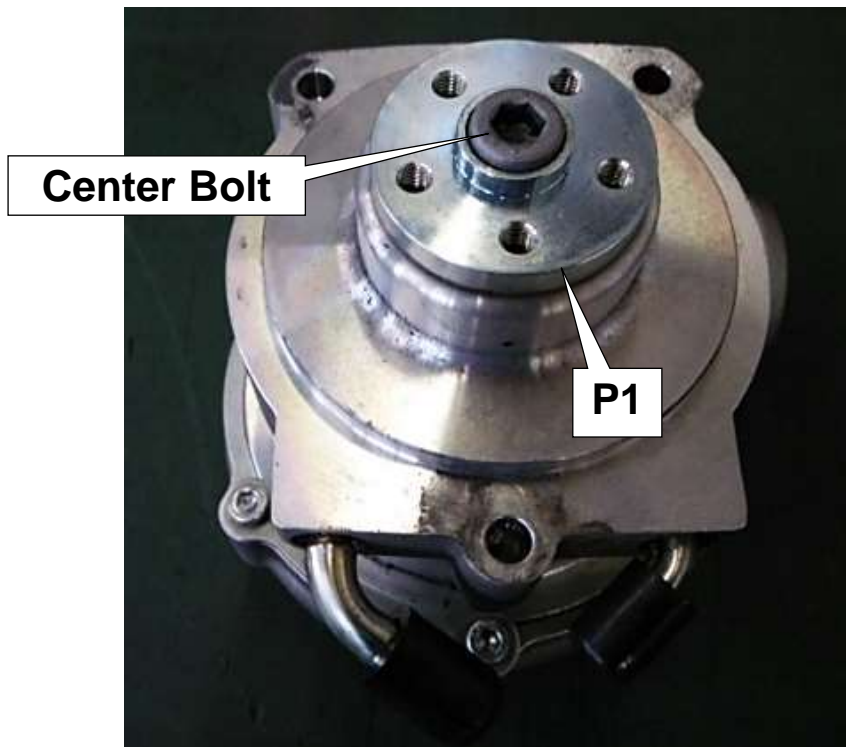


(5) Temporarily install the Supercharger Adapter Pulley.

- P1 Supercharger Adapter Pulley x 1

**NOTE**

✧ Use the removed center bolt.



(6) Install the Supercharger Pulley to Supercharger Adapter Pulley.

- P2 Supercharger Pulley x 1
- P22 Low Head Cap Bolt M6 L12 X5



(7) Wrap an old belt around the pulley and secure the pulley by holding it with a vice or something similar the same manner done in 2.(1).

 CAUTION

- Do not apply excessive force to the pulley when holding it to avoid deforming of the pulley. Apply force which is only necessary to hold the belt so it does not slip from a vice.



(8) Tighten the center bolt of the pulley.

**Tightening Torque**

$$T=80N \cdot m(8.2kgf \cdot m)$$

(9) Remove Supercharger Pulley From Adapter Pulley.

### 3. INSTALLATION OF GT SUPERCHARGER

After this procedure, refer to “2. MODIFICATION & RELOCATION OF FACTORY PARTS (14)” from the installation manual of 12001-KT003 to install the supercharger.



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