

Kia Stinger / Genesis G70 3.3T Turbo Replacement Guide

Focused DIY guide for the 3.3L twin-turbo Lambda II T-GDI platform

Applies to Kia Stinger 3.3T and Genesis G70 3.3T. This guide is built around public Kia service information and the Kia SC300 technician procedure for the left-hand turbo oil-feed access path. The photo pages use real labeled OEM technician images.

Use this as a practical shop guide for turbo removal planning and replacement sequencing. VIN-specific differences and values that are not publicly exposed still require KGIS or Genesis TechInfo verification.

What this guide covers

- Real labeled technician photos for the left-hand turbo access path.
- Factory removal sequence for the turbocharger and exhaust-manifold module.
- Tool list, one-time-use parts list, torque quick reference and post-install checks.
- Clear separation between factory specifications and practical field-access recommendations.

Limitations

- The public photo set is strongest for the left-hand side. Right-hand turbo work is similar in concept but is not fully photo-documented in public OEM material.
- Hybrid-turbo kit-specific wastegate, actuator and calibration instructions vary by vendor. Follow the exact kit manual for those settings.
- Some OEM screenshots note that the engine is removed for illustration only. The repair sequence itself is still used to identify the service path.

KJT PRODUCT PAGE: [MuchBoost Hybrid Turbo Upgrade](#)

KJT Product Reference

MuchBoost Hybrid Turbo Upgrade

Product image and purchase link from the Kim Jong Tuned website.



[Open KJT product page](#)

KJT URL:

<https://www.kimjongtunedperformance.com/product-page/muchboost-hybrid-turbo-upgrade>

Added from KJT site only

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1. Scope and vehicle coverage

Primary coverage

- 2018-2023 Kia Stinger GT / GT1 / GT2 with the 3.3L twin-turbo V6.
- Genesis G70 3.3T models using the same Lambda II 3.3L T-GDI twin-turbo layout.
- The guide focuses on the left-hand turbocharger and turbo manifold module because that side has the strongest public OEM photo coverage through Kia SC300.

Left-hand orientation

Kia labels the driver-side turbo area as LH on left-hand-drive U.S. vehicles. When you stand at the front bumper and look into the engine bay, this is the turbo area on your left.

Practical shop note

The job has two layers. First, remove the intake, cowl-side, control-module and coolant/oil-feed interference items to expose the turbo area. Second, remove the exhaust-side, catalyst-side and fluid-line attachments so the turbo manifold module can come out.

2. Parts, materials and one-time-use items

Category	Use / note
Turbo manifold module gasket	Use a new gasket when reinstalling the turbo manifold module.
Turbo manifold module nuts	The Stinger service-manual procedure says to use new nuts during installation.
Oil feed pipe gasket	Replace when the oil feed pipe is removed.
Eye-bolt copper washers	Kia SC300 says not to reuse the copper washers at the turbocharger water-pipe eye bolts. It also says not to reuse the copper gasket at the oil-feed eye bolt.
Oil drain pipe gaskets A and B	Replace when the turbocharger oil drain pipe is removed.
Warm-up catalytic converter gasket	Replace when the warm-up catalytic converter is removed.
Upper radiator hose	SC300 specifically says not to reuse this hose once removed.
Oil level pipe and retaining bolt	SC300 says not to reuse the oil level pipe or its retaining bolt once removed.
Engine oil and coolant	Top off or refill after repair. Keep coolant color matched. Do not mix pink and green coolant.
Hybrid-turbo kit contents	Verify supplied studs, actuator settings, gaskets, banjo hardware, coolant/oil-line hardware and any calibration instructions from the turbo vendor.

Do not skip the one-time-use notes. The Kia SC300 bulletin specifically calls out the upper radiator hose, water-pipe copper washers, oil-feed eye-bolt copper gasket, oil-feed pipe gasket, and oil level pipe/bolt in the steps it covers.

3. Tools and field-access stack

- **Factory special tools called out publicly:** SST 0K282 CK001QQK for the turbocharger water-pipe eye bolts, and SST 09392 1Y100 for the oxygen sensor.
- **Normal shop tools:** metric socket set, ratchets, torque wrench that covers inch-pound and foot-pound ranges, hose-clamp pliers, trim clip tools, picks, drain pans, line caps, shop towels, magnetic pickup tool and strong task lighting.
- **Practical field-access recommendations:** 1/4-inch and 3/8-inch drive ratchets, 3-inch and 6-inch extensions, a short wobble extension, a small universal joint, deep and shallow metric sockets, and a dedicated O2-sensor socket.
- **Optional but useful:** vacuum coolant-fill tool or pressure bleeder, borescope, and a low-range torque wrench for small line and bracket hardware.

Label rule

In this guide, “factory/OEM” means the value or instruction came from Kia service material or the SC300 bulletin. “Field access” means a tool or approach used to reach the fastener cleanly. Field-access notes are not factory specifications.

4. Torque quick reference

Item	Torque
Engine room front under cover bolts	7.8-11.8 N·m (5.8-8.7 lb-ft)
Cowl top cover bolts	7.8-11.8 N·m (5.8-8.7 lb-ft)
Lower LH front strut bar bolts	46.1-60.8 N·m (34.0-44.8 lb-ft)
LH air cleaner assembly bolts	7.8-9.8 N·m (5.8-7.2 lb-ft)
Hose assembly bolts	7.8-11.8 N·m (5.8-8.7 lb-ft)
TCU nuts	9.8-11.8 N·m (7.2-8.7 lb-ft)
Turbocharger water feed pipe eye bolts	26.5-32.4 N·m (19.5-23.7 lb-ft)
Water outlet pipe bolts	24.5-28.4 N·m (18.1-21.0 lb-ft)
LH turbo manifold module stay bolts	26.5-31.4 N·m (19.5-23.1 lb-ft)
Oil level pipe bolt	17.7-21.6 N·m (13.0-15.9 lb-ft)
Camshaft position sensor bolt	6.8-9.8 N·m (5.0-7.2 lb-ft)
LH oil feed pipe nuts	9.8-11.8 N·m (7.2-8.7 lb-ft)
LH oil feed pipe eye bolt	11.8-17.7 N·m (8.7-13.0 lb-ft)
Intercooler inlet hose & pipe nuts	14.7-19.6 N·m (10.8-14.5 lb-ft)
Turbocharger inlet hose clamp	4.9-6.9 N·m (3.6-5.1 lb-ft)
Heat protector bolts	7.8-11.8 N·m (5.8-8.7 lb-ft)
WCC heat protector bolts	18.6-23.5 N·m (13.7-17.4 lb-ft)
WCC stay bolts B / C	18.6-27.5 N·m and 52.0-57.9 N·m
WCC nuts	49.0-53.9 N·m (36.2-39.7 lb-ft)
Oil drain pipe bolts	7.8-11.8 N·m (5.8-8.7 lb-ft)
Turbo manifold module nuts	49.0-53.9 N·m (36.2-39.7 lb-ft)

Any value not shown here was not clearly exposed in the public sources used for this guide. Check KGIS or Genesis TechInfo by VIN before tightening hardware that is not listed above.

5. Stage 1. Prep, drain and upper access

- Disconnect the negative battery cable first.
- Remove the radiator cap, remove the engine room front under cover, and drain coolant at the radiator drain plug.
- Lower the vehicle again and remove the cowl top cover to open the left rear corner of the engine bay.
- Match coolant color exactly. Do not mix green and pink coolant.

Next page: full-page OEM technician photo reference for this stage.

5A. Photo reference - Stage 1

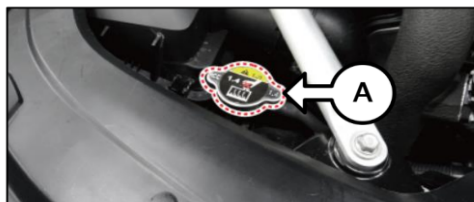
Use the lettered callouts in the OEM image together with the step summary on the previous page. The screenshot is reproduced as a technician reference, not as a substitute for the current KGIS procedure.

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SUBJECT: LEFT-HAND OIL FEED PIPE AND HOSE ASSEMBLY REPLACEMENT (SC300)

Repair Procedure:

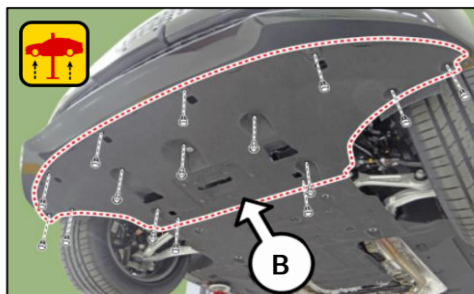
1. Disconnect the negative (-) battery terminal.
2. Remove the Radiator Cap (A).



3. Loosen the bolts to remove the engine room front under cover (B).



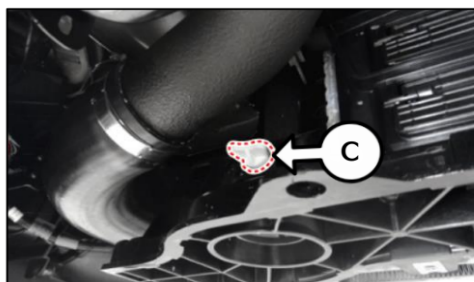
Tightening torque for bolts:
5.8 - 8.7 lb.ft (7.8 - 11.8 N.m)



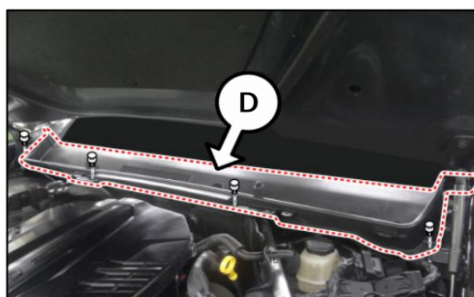
4. Loosen the radiator drain plug (C) and drain coolant.

ⓘ IMPORTANT

DO NOT mix green and pink coolant. Ensure that vehicles equipped with green coolant are replenished with green coolant and vehicles equipped with pink coolant are replenished with pink coolant.



- 5a. Lower the vehicle.
- 5b. Remove the Cowl Top Cover (D) by referring to "Body (Interior and Exterior) → Cowl Top Cover → Repair procedures" in the applicable Shop Manual on KGIS.



Printed TSB copy is for reference only; information may be updated at any time. Always refer to KGIS for the latest information.

TSB: SC300 (Rev 2) K900 (RJ) and Stinger (CK) April 2024



OEM SC300 technician screenshot, page 2 of 9. The lettered photos identify the radiator cap, engine-room under cover, radiator drain and cowl-top access points.

6. Stage 2. Intake box, hose assembly and control modules

- On Stinger, remove the lower LH front strut bar.
- Disconnect the LH breather hose and LH air intake hose, then remove the LH air cleaner assembly.
- Remove the hose assembly, then disconnect the ECM connector, TCU connector and wiring protector hardware.
- Remove the upper LH strut bar, LH engine-room panel and TCU to open the turbo-side upper work area.

Next page: full-page OEM technician photo reference for this stage.

6A. Photo reference - Stage 2

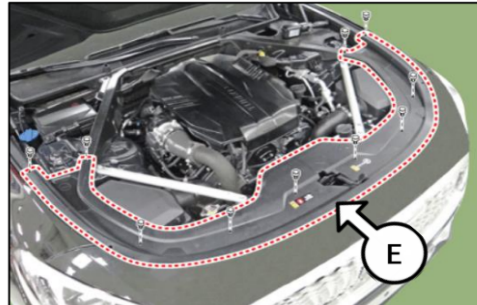
Use the lettered callouts in the OEM image together with the step summary on the previous page. The screenshot is reproduced as a technician reference, not as a substitute for the current KGIS procedure.

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SUBJECT: LEFT-HAND OIL FEED PIPE AND HOSE ASSEMBLY REPLACEMENT (SC300)

K900 (RJ) Only:

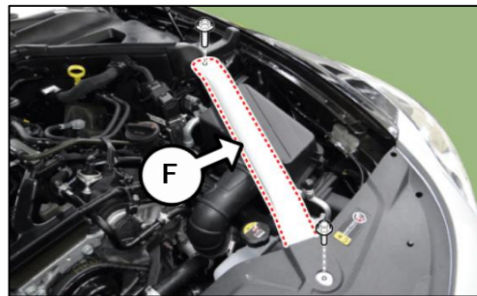
- 6a. Remove the Radiator Grill Upper Cover (E).



- 6b. Loosen the two (2) bolts to remove the lower left-hand (LH) front strut bar (F).



Tightening torque for bolts:
34.0 - 44.8 lb.ft (46.1 - 60.8 N.m)



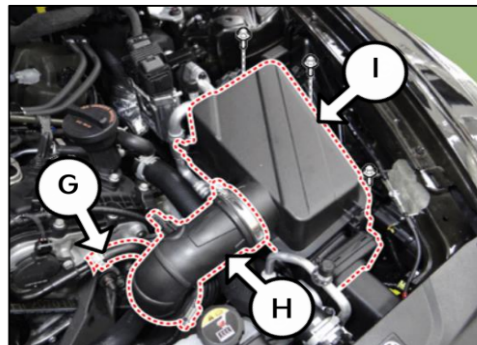
- 7a. Disconnect the LH breather hose (G).

- 7b. Disconnect the LH air intake hose (H).

- 7c. Loosen the three (3) bolts to remove the LH air cleaner assembly (I).



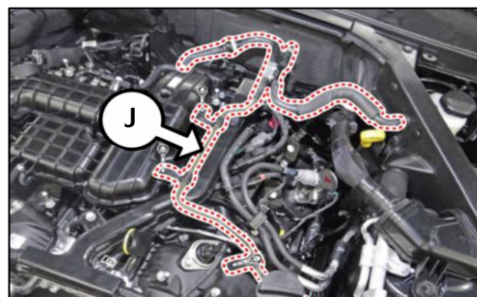
Tightening torque for bolts:
5.8 - 7.2 lb.ft (7.8 - 9.8 N.m)



8. Loosen the four (4) bolts and disconnect hose ends to remove the hose assembly (J).



Tightening torque for bolts:
5.8 - 8.7 lb.ft (7.8 - 11.8 N.m)



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OEM SC300 technician screenshot, page 3 of 9. This page shows the lower strut bar, breather hose, intake hose, air cleaner assembly, hose assembly and TCU-side access hardware.

7. Stage 3. AC line, coolant hard line and upstream hardware

- Zip-tie the AC line to the body to gain working room without stressing the refrigerant system.
- Free the wiring harness from the mounting clip.
- Use SST 0K282 CK001QQK to loosen the two eye bolts from the turbocharger water pipe.
- Do not reuse the copper washers at the water-pipe eye bolts.

Next page: full-page OEM technician photo reference for this stage.

7A. Photo reference - Stage 3

Use the lettered callouts in the OEM image together with the step summary on the previous page. The screenshot is reproduced as a technician reference, not as a substitute for the current KGIS procedure.

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SUBJECT: LEFT-HAND OIL FEED PIPE AND HOSE ASSEMBLY REPLACEMENT (SC300)

13. Using a zip-tie, secure the AC line to the vehicle body, as shown.



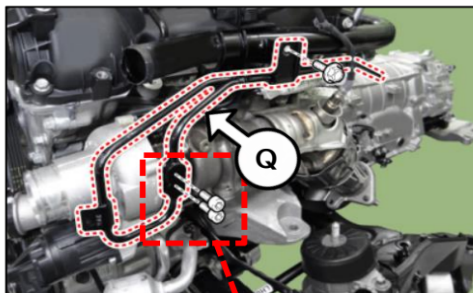
14. Separate the wiring harness from the mounting clip, as shown.



15. Using SST OK282 CK001QQK, loosen the two (2) eye bolts from the turbocharger water pipe (Q).

❶ IMPORTANT

DO NOT reuse copper washer.



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TSB: SC300 (Rev 2) K900 (RJ) and Stinger (CK) April 2024

OEM SC300 technician screenshot, page 5 of 9. This page shows AC-line retention, the harness clip and the turbocharger water-pipe eye-bolt area, including a useful tool-position close-up.

8. Stage 4. O2 sensor, upper hose, outlet pipe and turbo stay

- Use SST 09392 1Y100 or an equivalent oxygen-sensor socket to remove the LH O2 sensor.
- Remove the upper radiator hose. The SC300 bulletin says not to reuse this hose after removal.
- Remove the water outlet pipe.
- Remove the LH turbo manifold module stay. Watch the rear fastener carefully because the work area has sharp edges.

Next page: full-page OEM technician photo reference for this stage.

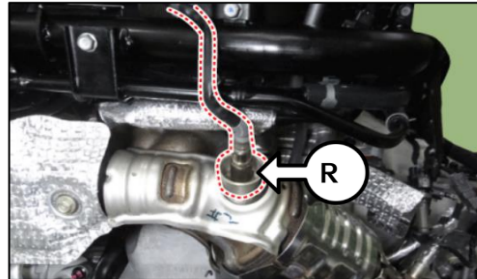
8A. Photo reference - Stage 4

Use the lettered callouts in the OEM image together with the step summary on the previous page. The screenshot is reproduced as a technician reference, not as a substitute for the current KGIS procedure.

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SUBJECT: LEFT-HAND OIL FEED PIPE AND HOSE ASSEMBLY REPLACEMENT (SC300)

16. Using SST 09392 1Y100, loosen to remove the LH oxygen sensor (R).



Note: Engine is removed for illustration purposes only.

17. Remove the upper radiator hose (S).

Note: **DO NOT** reuse the upper radiator hose.



18. Loosen the two (2) bolts to remove the water outlet pipe (T).

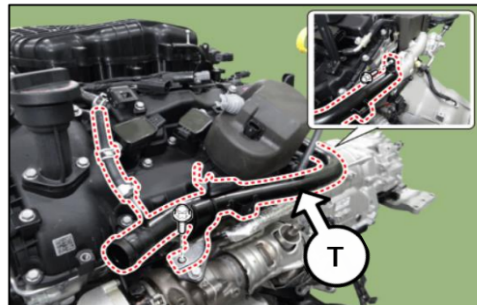


Tightening torque for bolts:
18.1 - 21.0 in.lb (24.5 - 28.4 N.m)



WARNING

Use caution when removing the rear bolt as sharp objects can cause injury.

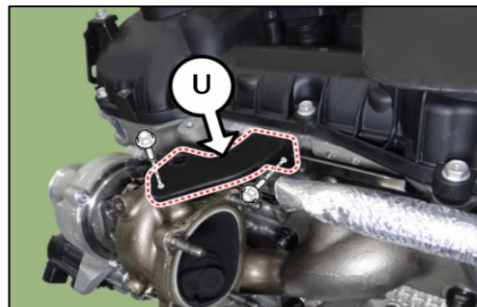


Note: Engine is removed for illustration purposes only.

19. Loosen the two (2) bolts to remove the LH turbo manifold module stay (U).



Tightening torque for bolts:
19.5 - 23.1 lb.ft (26.5 - 31.4 N.m)



Note: Engine is removed for illustration purposes only.

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TSB: SC300 (Rev 2) K900 (RJ) and Stinger (CK) April 2024



OEM SC300 technician screenshot, page 6 of 9. The images identify the O2 sensor, upper radiator hose, water outlet pipe and LH turbo manifold module stay.

9. Stage 5. Dipstick tube, cam sensor, vacuum pipe and oil feed line

- Remove the foam around the high-pressure fuel pump, then remove the oil level gauge and oil level pipe. Do not reuse the oil level pipe or retaining bolt.
- Disconnect the bank 2 exhaust camshaft position sensor connector and remove the sensor if required for clearance.
- Loosen the brake vacuum pipe retaining bolt so the pipe can move.
- Loosen the wire-harness mounting bolt and disconnect cylinder #3 ignition-coil connector if required for access.
- Loosen the two oil-feed pipe nuts, then the oil-feed pipe eye bolt. Do not reuse the eye-bolt copper gasket or the oil-feed pipe gasket.

Next page: full-page OEM technician photo reference for this stage.

9A. Photo reference - Stage 5

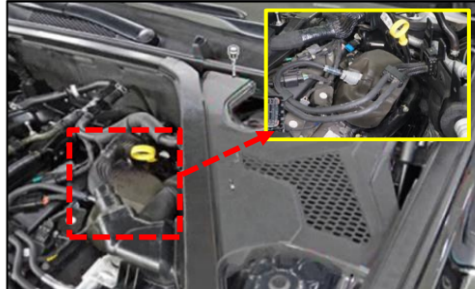
Use the lettered callouts in the OEM image together with the step summary on the previous page. The screenshot is reproduced as a technician reference, not as a substitute for the current KGIS procedure.

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SUBJECT: LEFT-HAND OIL FEED PIPE AND HOSE ASSEMBLY REPLACEMENT (SC300)

20. Remove the foam covering the high pressure fuel pump.

Note: The foam has a horizontal split. Spread the foam apart and pull outwards to remove.



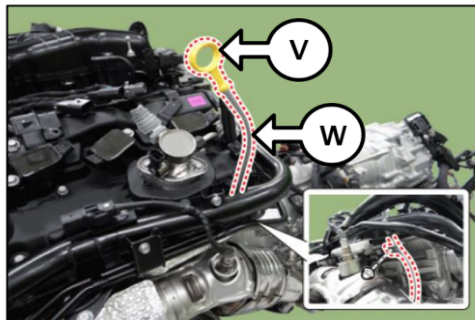
- 21a. Remove the oil level gauge (V).

- 21b. Loosen the bolt to remove the oil level pipe (W).

Note: DO NOT reuse bolt and oil level pipe (W).



Tightening torque for bolt:
13.0 - 15.9 lb.ft (17.7 - 21.6 N.m)



Note: Engine is removed for illustration purposes only.

- 22a. Disconnect the bank 2 / exhaust camshaft position sensor connector (X).

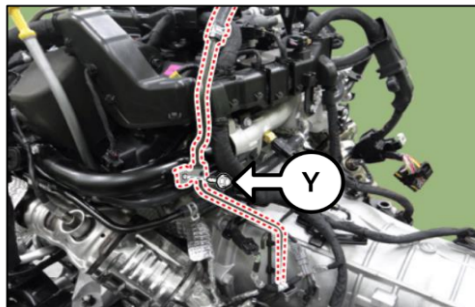
- 22b. Loosen the bolt to remove the bank 2 / exhaust camshaft position sensor.



Tightening torque for bolt:
5.0 - 7.2 lb.ft (6.8 - 9.8 N.m)



23. Loosen the bolt to allow the brake vacuum pipe (Y) to move.



Note: Engine is removed for illustration purposes only.



Printed TSB copy is for reference only; information may be updated at any time. Always refer to KGIS for the latest information.

TSB: SC300 (Rev 2) K900 (RJ) and Stinger (CK) April 2024

OEM SC300 technician screenshot, page 7 of 9. The photos show the HPFP foam, oil-level pipe area, cam sensor connector and brake-vacuum pipe clearance points.

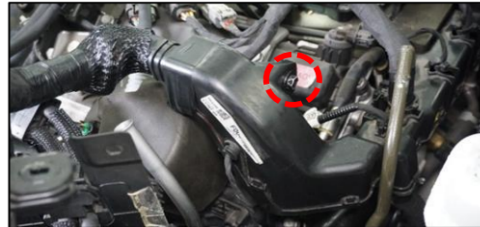
9B. Stage 5 continuation and reassembly baseline

The next OEM page shows the final oil-feed fasteners and the replacement pipe. After the pipe is replaced, Kia directs the technician to reinstall removed parts in reverse order, restore lost engine oil, and perform the coolant filling and air-bleeding procedure through KGIS.

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SUBJECT: LEFT-HAND OIL FEED PIPE AND HOSE ASSEMBLY REPLACEMENT (SC300)

24. Loosen the wire harness mounting bolt.



25. Disconnect cylinder #3 ignition coil connector.

- 26a. Loosen the two (2) oil feed pipe nuts.

- 26b. Loosen the oil feed pipe eye bolt.

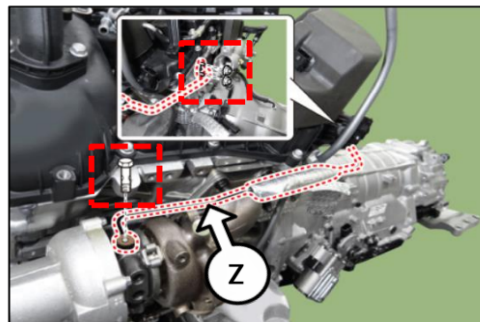
- 26c. **Replace** the LH oil feed pipe (Z) with the new and improved part.

Note: DO NOT reuse eye bolt copper gasket and oil feed pipe gasket.



Tightening torque for nuts:
7.2 - 8.7 lb.ft (9.8 - 11.8 N.m)

Tightening torque for eye bolt:
8.7 - 13.0 lb.ft (11.8 - 17.7 N.m)

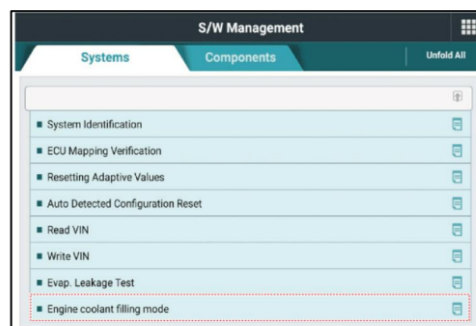


Note: Engine is removed for illustration purposes only.

27. Reinstall all removed parts in reverse order of removal.
28. Refill the lost engine oil from LH oil feed pipe and hose assembly leak.
Refer to KGIS for oil specifications NPNENG5W30
29. Perform the coolant filling and air bleeding procedure by referring to "Engine Mechanical System → Coolant → Repair procedures" in the applicable Shop Manual on KGIS.

❶ IMPORTANT

DO NOT mix green and pink coolant. Ensure that vehicles equipped with green coolant are replenished with green coolant and vehicles equipped with pink coolant are replenished with pink coolant.



30. Confirm normal vehicle operation.

Printed TSB copy is for reference only; information may be updated at any time. Always refer to KGIS for the latest information.

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OEM SC300 technician screenshot, page 8 of 9. This page shows the final LH oil-feed pipe fasteners and replacement pipe Z, plus the coolant-filling reference screen.

10. Full LH turbo/manifold module removal sequence

SC300 gives the best public photo access path. To actually remove the LH turbo manifold module, continue with the public Stinger service-manual sequence below.

1. Remove the engine cover and disconnect the negative battery terminal if not already done.
2. Remove the engine room front under cover.
3. Remove the air intake hose.
4. Disconnect the recirculation valve connector and vacuum hose.
5. Remove the intercooler inlet hose and pipe assembly.
6. Remove the turbocharger inlet hose.
7. Remove the heat protector.
8. Remove the heated oxygen sensor.
9. Remove the warm-up catalytic converter heat protector.
10. Remove the front muffler.
11. Remove the warm-up catalytic converter stay.
12. Remove the RH hood sealing cover if required for access.
13. Remove the warm-up catalytic converter and gasket.
14. Remove the turbocharger water feed pipe and hose.
15. Remove the oil feed pipe.
16. Disconnect the turbocharger water drain hose.
17. Remove the turbocharger oil drain pipe.
18. Remove the turbo manifold module stay.
19. Remove the turbo manifold module.
20. On installation, use a new turbo manifold gasket and new turbo manifold nuts. Protect the oil feed and drain pipes from bending, crushing or cracking.

Tightening details from the public service-manual page

- Intercooler inlet hose and pipe nuts: 14.7-19.6 N·m.
- Turbocharger inlet hose clamp: 4.9-6.9 N·m.
- Heat protector bolts: 7.8-11.8 N·m.
- WCC heat protector bolts: 18.6-23.5 N·m.
- WCC stay bolts: 18.6-27.5 N·m and 52.0-57.9 N·m depending on location.
- WCC nuts: 49.0-53.9 N·m.
- Turbocharger water feed pipe and hose: 26.5-32.4 N·m.
- Oil feed pipe fasteners: 11.8-17.6 N·m and 7.8-11.8 N·m depending on connection point.
- Oil drain pipe: 7.8-11.8 N·m.
- Turbo manifold module stay: 18.6-27.5 N·m and 52.0-57.9 N·m depending on location.
- Turbo manifold module nuts: 49.0-53.9 N·m.

11. Hybrid-turbo installation notes

- If you are installing a hybrid or upgraded unit rather than a stock replacement, complete the physical removal work above first.
- Verify that the kit includes or specifies all gaskets, studs, banjo hardware, wastegate components, coolant-line hardware and oil-line hardware.
- Before final install, compare the stock and replacement units side by side. Confirm the orientation of the oil feed, oil drain, water feed, water drain, recirculation valve and wastegate actuator.
- Do not assume actuator settings or electronic wastegate calibration carry over. Follow the exact kit instructions if the vendor specifies preload, voltage adjustment or calibration procedures.
- Pre-lube or prime the turbo only as allowed by the vendor and OEM oiling path. Never dry-start a new turbo after the oil lines were open.
- If the replacement kit needs supporting tuning, injectors, CPI, downpipes or charge piping, finish those requirements before final startup.

Public-source limit

TurboKits publishes a resource page that lists a 2018+ Stinger 3.3TT TK700 ball-bearing EWGa voltage-adjustment instruction, but a full public illustrated installation manual for the complete turbo kit was not available in the sources used here. Kit-specific setup still needs to come from the vendor package or vendor support.

12. First start, priming and leak checks

- Confirm every removed electrical connector is reconnected, especially ECM/TCU connectors, the recirculation-valve connector, cam sensor connector and any ignition-coil connectors moved for access.
- Confirm all oil-feed and oil-drain fasteners are tight, all new gaskets and washers are installed, and coolant hoses are fully seated.
- Restore engine oil lost during oil-feed or oil-drain work.
- Refill and bleed coolant using the OEM procedure. Kia SC300 specifically points the technician to the coolant filling and air-bleeding procedure in KGIS.
- Perform the first start and let the engine idle. Do not immediately free-rev the engine. Watch the oil-feed area, coolant fittings, drain-pipe area, WCC flanges and upper-hose connections for leaks.
- After idle stabilizes, verify there is no smoke from an oil leak, no coolant loss, no abnormal exhaust-leak sound and no fault lamps. Perform a gentle road test, then recheck for seepage after cool-down.

13. Sources and verification trail

Source	How it was used
Kia SC300 (Rev 2, June 13, 2024) - Left-Hand Oil Feed Pipe and Hose Assembly Replacement	Primary public photo walkthrough. Used for the real labeled technician photos, one-time-use notes, special-tool callouts and several torque values.
Kia Stinger CK service manual - Turbocharger & Exhaust Manifold	Used for the full turbo manifold module removal sequence, component list, installation cautions and related torque values.
TurboKits public Installation Instructions resource page	Used only to confirm the vendor publishes kit-specific turbo instructions and EWGa adjustment material for the platform.
TurboKits TK700 hybrid-turbo product page	Used only to confirm public fitment language for the Stinger 3.3TT hybrid-turbo application.

VIN-specific reminder

Genesis TechInfo and KGIS remain the final authority for VIN-specific service differences. If your car has a different model year, package or prior aftermarket build, verify any questionable part, torque or routing detail before disassembly.