

Awsome Turbo Performance



maximum
power for
off road
and
highway
with
total
reliability
to
improve
the
legend

SAFARI 4x4 Turbocharger Systems for Landcruiser FJ80 & Lexus LX450

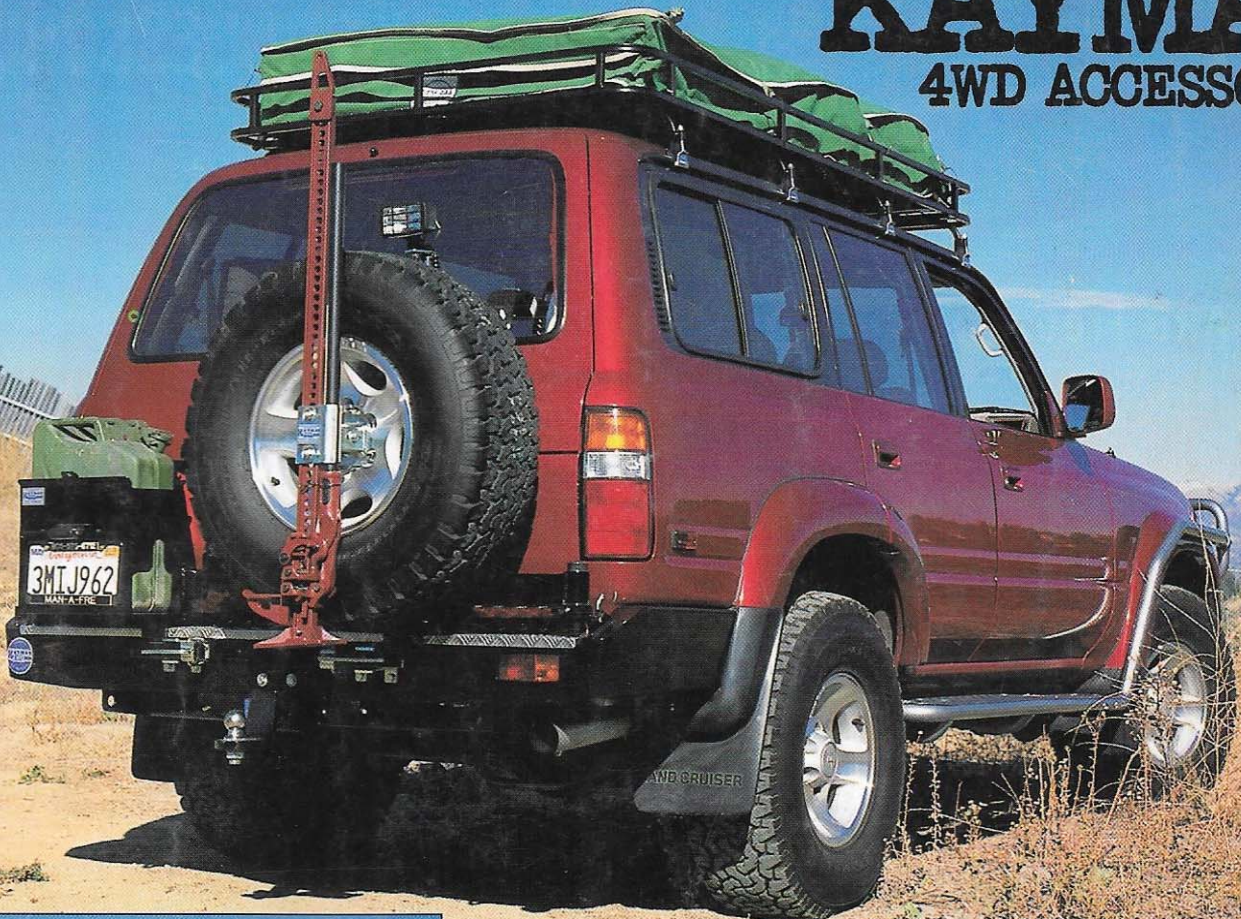
Here is awesome turbocharger power to provide the performance you never believed possible. The professional combination of turbocharging, intercooling and a multi-valve design results in the Landcruiser's 1FZ-FE engine being able to take in more air/fuel mixture and produce significantly more power and torque throughout the RPM range. From climbing the steepest hills in low gear, to pulling the heaviest loads, to cruising at high cruising speeds on the highway, the Safari

Turbo Charger System provides the type of performance you thought you could only dream of before. Now its offered to you with the quality of a factory OEM design that's fully tested and proven to assure complete OEM style compatibility and reliability. Plus it's fully C.A.R.B. exempt for street legal operation in all states. The exciting line of Australian designed and built SAFARI 4x4 product line for off-road vehicles is distributed in North America by Man-A-Fre, the Landcruiser specialists.



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- Roof Racks, Roof Rack Bags • Camp/Work Lights

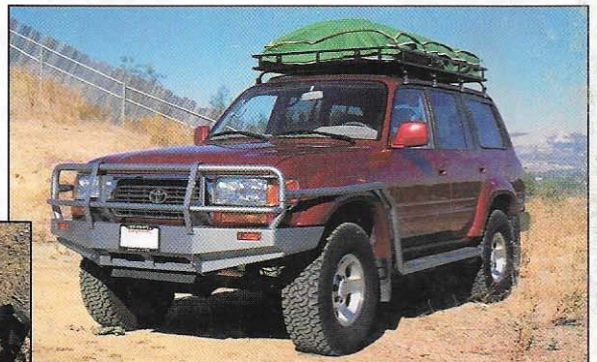
Also Shown: ARB Freezer / Fridge works on 12, 24, 110 Volts, 3 sizes: 31, 41, 63 qt. Designed for off-road up to angles of 30 deg. Draws .9 amps fridg / 3.5 amps freezer.

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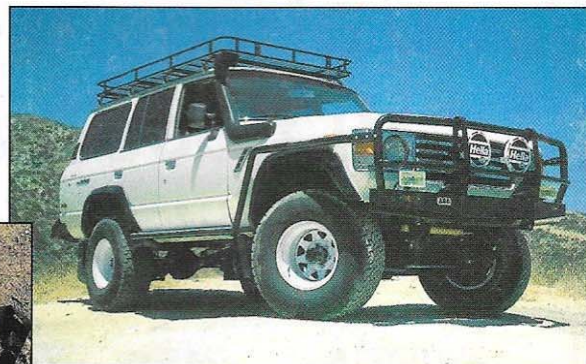
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SAFARI 4X4 USA

INTERCOOLED TURBOCHARGER SYSTEMS

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NOTES and AMMENDMENTS to installation instructions.

- A) Please note that the turbocharger assembly as shown in **assembly diagram 5-TURBOCHARGER ASSEMBLY** is supplied fully assembled from the factory and that part numbers 191,192,193,194,195,196,197,199,200,201,202,203,204,205,206,207,208, and 209 make up this complete assembly, and as such are not covered individually in the installation instructions.
- B) The Australian version of this kit is supplied with a complete exhaust system, but as USA vehicles are equipped with Catalytic Convertors, and Oxygen Sensors, we supply a locally manufactured down pipe to connect turbo outlet casting to the OEM Catalytic Converter, and Oxygen Sensor in lieu of the Australian exhaust system.
- C) The support bracket and mounting hardware for the Australian exhaust system are not included with this kit. Part numbers 13,14, and 15.

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SAFARI 4X4 INTERCOOLED TURBO INSTALLATION GUIDE

WARNING!! Installation of this kit by other than authorized Safari 4x4 Dealer, and authorized/trained technicians will void warranty!

1) In a clean location identify, and layout all components by following sections

- a. EXHAUST
- b. AIR DUCTING
- c. TURBOCHARGER
- d. LUBRICATION
- e. WATER
- f. AUX. FUEL

2) Assign item number to each component according to identification chart provided.

3) Disconnect battery ground lead. Remove air cleaner top cover, and air intake hose to throttle body.

4) Remove exhaust manifold, and connector pipe w/primary oxygen sensor & catalytic convertor.

5) Unbolt A/C line from bracket at right front shock tower. Remove support bracket.

6) **Refer to assembly figure #1-EXHAUST.** On work bench install 5 x 8mm studs(item #8) to exhaust outlet of turbine housing(item #193) in 5 pre-threaded holes. Install 3 x 10mm studs(item #4) to lower pre-threaded holes in "TURBO OUTLET CASTING" (item #7). Apply thin layer of "ULTRA COPPER" sealant to mating surface of two units, and attach "Turbine Outlet Casting" to Turbine housing outlet(preassembled at factory item #193) using Selflocking nuts & washers(items #9&10).

7) Install sealing rings(item #3) into grooves of front exhaust manifold(item #1), making sure ring ends are offset 180deg. Install 4 x 10mm studs(item #4) into threaded holes on rear exhaust manifold(item #2) at turbo mounting flange. Carefully slide male section w/sealing rings of front manifold into female opening of rear exhaust manifold.

8) Apply a small amount of thread sealant and install 90deg. adapter(item #83) into top of turbo housing(item #191) so that when installed into vehicle fitting points to right(passenger) side of vehicle as shown in **assembly figure #6 LUBRICATION.**

9) Install "Oil Drain Upper"(item #85) onto turbo using gasket(item #84), bolts(item #89), and washers(item #90) as shown in **assembly figure #6 LUBRICATION.**

10) Install "Banjo Fittings"(item #91) onto turbo using "Banjo Bolts"(item #92) and sealing washers(item #93) as shown in **assembly figure #7-WATER**

11) Apply a thin layer of "ULTRA COPPER" to the mating surface between the turbo and manifold, and mount the turbo assembly to the manifold with 4 x ea 10mm selflock nuts(item #5) and washers(item #6). Set assembly aside for later installation.

12) **PREASSEMBLY OF INTERCOOLER: Refer to assembly figure #4A-INTERCOOLER Core Installation.** On workbench install 4 x 30mm Intercooler mounting pins(item #70) to Intercooler core assembly as shown. Install 4 x intercooler rubber mounting bushings(item #71) as shown.

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- 13) Remove and carefully set aside: front bumper, front grille, headlight assemblies, radiator bracket center support rod w/brace from body, transmission oil cooler w/lines, and horns w/mounting bracket.
- 14) Remove the oil pressure sending unit. Refer to **assembly diagram #6-LUBRICATION** and install the oil supply adapter(item #81) using teflon tape on threads. Make sure opening in adapter for refitment of sending unit faces forward. Install sending unit into adapter as shown using teflon thread lube.
- 15) Remove the heater hose fitting from thermostat housing, with the heater hose leading to the firewall. Install new heater hose adapter(item #96) onto thermostat housing using selflocking nuts (item #110). Install fire sleeve(item #218) over heater hose(item #97). Install new heater hose w/fire sleeve(items #97 & 218) provided, from adapter to firewall fitting using 16/25mm clamps(item #99). Route the hose around air cleaner as shown in **assembly diagram #7-WATER**. secure heater hose with clamps(item #100), bolts(items #108 & 227), and washers(items #109 & 220).
- 16) Remove the two bolts at the front of the cylinder head that hold the steel water pipe in place. Install 2 x 8mm studs(item #104) in place of the bolts. Install 2 x spacers(item #105) onto studs, then mount hose(item #101) into clamps(item #103) and secure to studs with washers(item #107) and nuts(item #106). NOTE: items #107 & 106 are mislabeled in diagram as 102 & 107 respectively.
- 17) Locate boss on water outlet housing behind ignition distributor. Mark & drill boss to facilitate tapping hole to 1/4" BSP thread. **CAUTION!** offset hole away from engine on boss so that existing coolant pipe does not interfere with installation of adapter(item #94) when screwed into boss. Using teflon tape install 90deg adapter(item #94) and connect to hose(item #101).
- 18) Refer to **assembly diagram #4-INTERCOOLER**. Measure from air conditioning condensor to left 180mm, and 80mm up from bottom of sheet metal. At intersection drill a 83mm hole w/appropriate hole saw. Line opening with edging(item #36).
- 19) From under vehicle using bracket(item #60) as a guide drill two holes to facilitate use of 6.5mm self tapping screws(item #52) to mount bracket to vehicle body. Mount bracket.
- 20) Remove left front tire/wheel assembly and trim inner gaurd as per detail using template (item #64).
- 21) MOUNT INTERCOOLER ASSEMBLY: Drill out the inboard horn bracket mount captive nut to 8.5mm. Measure 450mm to right and drill another 8.5mm hole.
- 22) Install new center hood latch support bracket(item #48), using Bolt(item #75), washers(item #76), and nut(item #59) as shown in **diagram 4a-INTERCOOLER Core Installation**.
- 23) Install brackets(items #73,74) to top of intercooler mounts(item #71). Using brackets(items #47,49), nuts(items #67), and washers(items #65,68) mount brackets & intercooler as shown in **assembly diagram 4A-INTERCOOLER Core Installation**. Using brackets as guide drill 2 x 5mm holes through bottom of outer brackets for mounting of 2 x 6mm self tapping screws(item #52) and washers(item #58) to secure bottom of mounting brackets.
- 24) Install intercooler outlet duct(item #39) using 60/80mm hose clamp(item #38), and intercooler inlet duct(item #55) also using 60/80mm hose clamp(item #38) as shown.
- 25) Slide intercooler outlet duct(item #53) through 83mm protected hole in front panel. Using joiner duct(item #43), and 50/70mm hose clamps(item #45) attach outlet duct #43 to duct #39 as shown.
- 26) Refer to sump detail on **assembly diagram 6-LUBRICATION**. From under vehicle measure as shown 20mm down from sump boss, and 40mm to right of drain plug boss. At intersection drill & tap to 3/8" BSP. Use a vacuum cleaner and apply grease to tap to prevent metal from entering sump. Using Teflon tape install oil return fitting(item #86).

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- 27)INSTALL MANIFOLD/TURBO ASSEMBLY, refer to **assembly diagram 1-EXHAUST**. Install new manifold gaskets onto cylinder head studs, after cleaning gasket surface. Fit manifold/turbo assembly onto studs, and start threads of all nuts & washers, but do not tighten. Working from center-out tighten all nuts.
- 28)Install steel braided oil feed line(item #82) from sending unit adapter(item #81) to 90deg fitting(item#83) as per **assembly diagram 6-LUBRICATION**.
- 29)Install oil return line(item #87) from turbo to sump using 2 x 16/25mm hose clamps(item #88).
CAUTION! Cover oil return line with fire sleeve(item #80) before installation!!
- 30)Install steel braided water line(item #95) from Thermostat fitting(item #96) to inner banjo fitting(item#91) as per **assembly diagram 7-WATER**. Attach water hose(item #101) to outer banjo fitting on turbo.
- 31)Attach the compressor inlet duct(item #32) to the turbo inlet using 70/90mm hose clamps(item#34) as shown in **assembly diagram 3-AIR DUCTING**.
- 32)Attach compressor discharge duct(item #41) to turbo outlet, using silicone connector hose(item#63) and 50/70mm hose clamps(item #45) as shown.
- 33)Install cast intercooler inlet duct(item #44) between compressor discharge duct(item #41), and intercooler inlet duct(item #55) using silicone hump connector(item #42) and 50/70mm hose clamps(item#45) as shown in **assembly diagram 4-INTERCOOLER**. Secure cast intercooler inlet duct(item#44) to mounting bracket (item #60) using 8mm bolt(item #46)and spacer washer(item #65) as shown in detail. At right lower radiator mounting bracket, remove two nuts from radiator studs. Install bracket(item#40) onto mount as shown in **assembly diagram 4-INTERCOOLER**,with OEM nuts. Attach bracket(item#40)to intercooler inlet duct(item#44) using bolt(item#50), and washers(items 51,57)
- 34)Install joiner duct(item #33) to turbo inlet duct(item#32), using 70/90mm hose clamp(item #34) as shown in **assembly diagram 3-AIR DUCTING**. Make sure fitting to attach PCV hose faces to rear of vehicle as shown.
- 35)Remove 90deg PCV fitting from intake top plenum and plug with breather plug(item #37) Install PVC hose(item #35) from valve cover to joiner duct(item #33).
- 36)Refer to **assembly diagram 1-EXHAUST**. Install heat shields(items #16,17,18) using bolts(items#19,229), washers(item #20,21), support bracket(item #25), and nut (item #230)
- 37)Locate OEM down-pipe with Catalytic Convertor & Oxygen Sensor. Unbolt & remove Oxygen sensor from mounting flange. On Catalyst side of weld seam, as close to seam as possible, mark line to cut off down pipe. Measure from line to Oxygen sensor mounting flange, for relocation onto new down pipe. Cut off Catalyst from down pipe. Cut off Oxygen sensor mounting flange from down pipe. NOTE: cut flange so as to be reused on new down pipe.
- 38)Using vehicle, mount down pipe onto turbo outlet casting, and catalyst to OEM exhaust system. Weld down pipe to catalyst with suitable wire feed welder. NOTE: Down pipe may require trimming to length.
- 39)Remove welded down pipe/catalyst assembly from vehicle. Using measurement from OEM assembly for Oxygen sensor location, mark outline of flange onto down pipe. Cut material from down pipe to allow installation of Oxygen sensor flange. Weld flange onto down pipe using appropriate wire feed welder.
- 40)Apply thin film of "Ultra Copper" sealant to upper mating flange to TURBINE OUTLET CASTING. Install new down pipe using OEM hardware to OEM exhaust system, and self locking nuts(item#5), and washers (item#6) to attach to OUTLET CASTING. Using OEM hardware, re-install Oxygen sensor.

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- 41) Lay out new spark plugs(item #215) supplied with kit on clean rag. Gap electrode to Factory specifications, and apply a small amount of anti-sieze thread lubricant to each plug. Renew spark plugs.
- 42) Install 90deg silicone elbow(item #31) using 70/90mm hose clamps(item #34), as shown in **assembly diagram 3-AIR DUCTING**. Re-install air cleaner top section w/Air Mass Sensor, and align so as to fit silicone elbow(item #31) and secure with 70/90mm hose clamp(item #34).
- 43) On workbench take cast injector mounting duct(item #126), drill & tap holes as shown in **assembly diagram 8/9-AUX.FUEL** to 1/4" BSP. Apply teflon thread tape to plugs(item #235), and install in threaded holes. Attach mounting bracket(item #139) to bottom of cast duct(item #126) with 6mm bolt(item #141) and washers (items #124 & 118). Connect duct(item #126) to throttle valve with silicone hose(item #127) using 60/80mm hose clamps(item #128). Secure duct assembly to pre-threaded bosses in cylinder head using bolts(item #143) and washers(item #138) as shown. Secure throttle cable to cast duct(item #126) using clamp(item #147), bolt(item #117), and washer(item #118).
- 44) Connect rubber throttle body duct(item #56) to intercooler outlet hose(item #53) with intercooler outlet joiner duct(item #43) using 50/70mm hose clamps(item #45) as shown in **assembly diagram 4-INTER COOLER**.
- 45) Connect throttle body rubber duct(item #56) to cast injector mounting duct(item #126) with 60/80mm hose clamp(item #38) as shown in **assembly diagram 3-AIR DUCTING**. Secure throttle body rubber duct(item #56) to air cleaner as shown using 290mm nylon tie straps(item #69).
- 46) Refer to **assembly diagram 8/9-AUX.FUEL**, locate fuel vapor feed line to intake manifold from vapor canister, cut vapor line as shown and install one way valve(item #122) so flow is to intake only, and turbo cannot pressurize vapor system.
- 47) On workbench prepare to assemble transmission oil cooler assembly by unpacking separate oil cooler box, lay out and number items according to item packing list supplied with trans cooler assembly.
- 48) Line inside of bottom & top cooler mounting brackets(items #177 & 188) with rubber isolation strips(items #190 & 191) being careful to align holes in isolation strips with holes in mounting brackets.
- 49) Place oil cooler(item #176) into bottom cooler mounting bracket(item #177), then install top bracket(item #188) onto top of cooler(item #176). Install 4 x 6mm studs(item #181) through holes in upper & lower brackets and secure using 6mm nyloc nuts(item #184) and 6mm washers (item #183). **DO NOT OVERTIGHTEN!**
- 50) Bolt rubber air scoop(item #185) w/ support strap(item #186) to front of lower bracket(item #177) using 6mm bolts(item #182), washers(item #183) and 6mm nyloc nuts(item #184).
- 51) Mount assembly to bottom of frame rails using standard OEM bolts.
- 52) Attach oil cooler oil lines(items #179 & 180) to top of cooler, and fittings at firewall as shown in **assembly diagram** using 10/16mm hose clamps(item #187). **CAUTION DO NOT OVERTIGHTEN FITTINGS AT COOLER.**
- 53) Secure oil lines with Nylon cable ties(item #178).
- 54) Re-install horns, headlight assemblies, and front bumper.
- 55) Secure A/C line to right front shock tower using new mounting bracket(item #28). Attach bracket to tower using one bolt(item #29) into capture nut in tower with new washer(item #10). Mark and drill out upper tower mounting bracket hole to 8mm. Secure bracket with bolt(item #29), washers(item #10), and nut(item #30). Secure A/C line to bracket using bolt(item #229), washers(item #20), and nut (item #230)

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INSTALLATION of UNICHIP COMPUTER MODULE (item#240)

56) Move to passenger side glove box area. Remove glove box and right front speaker. Locate OEM ECU on right side of glove box opening under dash. Disconnect 4 wiring plugs from computer. Identify connectors using diagrams on following page "Wiring diagram for attaching UNICHIP Module to ECU".

57) Start at connector "E 7 D" locate black wire with blue stripe from terminal #1, and splice red wire from terminal #16 of UNICHIP Module.

58) Identify connector "E 5 C", splice brown wire with black stripe from terminal #9, to brown wire from terminal #3 of UNICHIP Module.

59) At connector "E 5 C" locate green wire no stripe from terminal #2, and cut through leaving enough wire on both sides of cut for connecting. On green wire side that leads to connector, connect to white wire from terminal #7 of UNICHIP Module. On green wire that leads to wiring harness, connect black wire from terminal #15 of UNICHIP Module.

60) At connector "E 5 C" locate green wire with black stripe from terminal #10, and splice to pink wire from terminal #8 of UNICHIP Module.

61) Identify connector "E 4 A". Locate black wire with green stripe from terminal #23, and cut through leaving enough wire on both sides of cut for connecting. On side of cut that leads to connector, connect to blue wire from terminal #5 of UNICHIP Module. On side of cut wire that leads to wiring harness, connect to purple wire from terminal #13 of UNICHIP Module.

62). Re-connect wiring plugs to computer. Mount UNICHIP Module to OEM computer with 2 sided tape as shown in class.

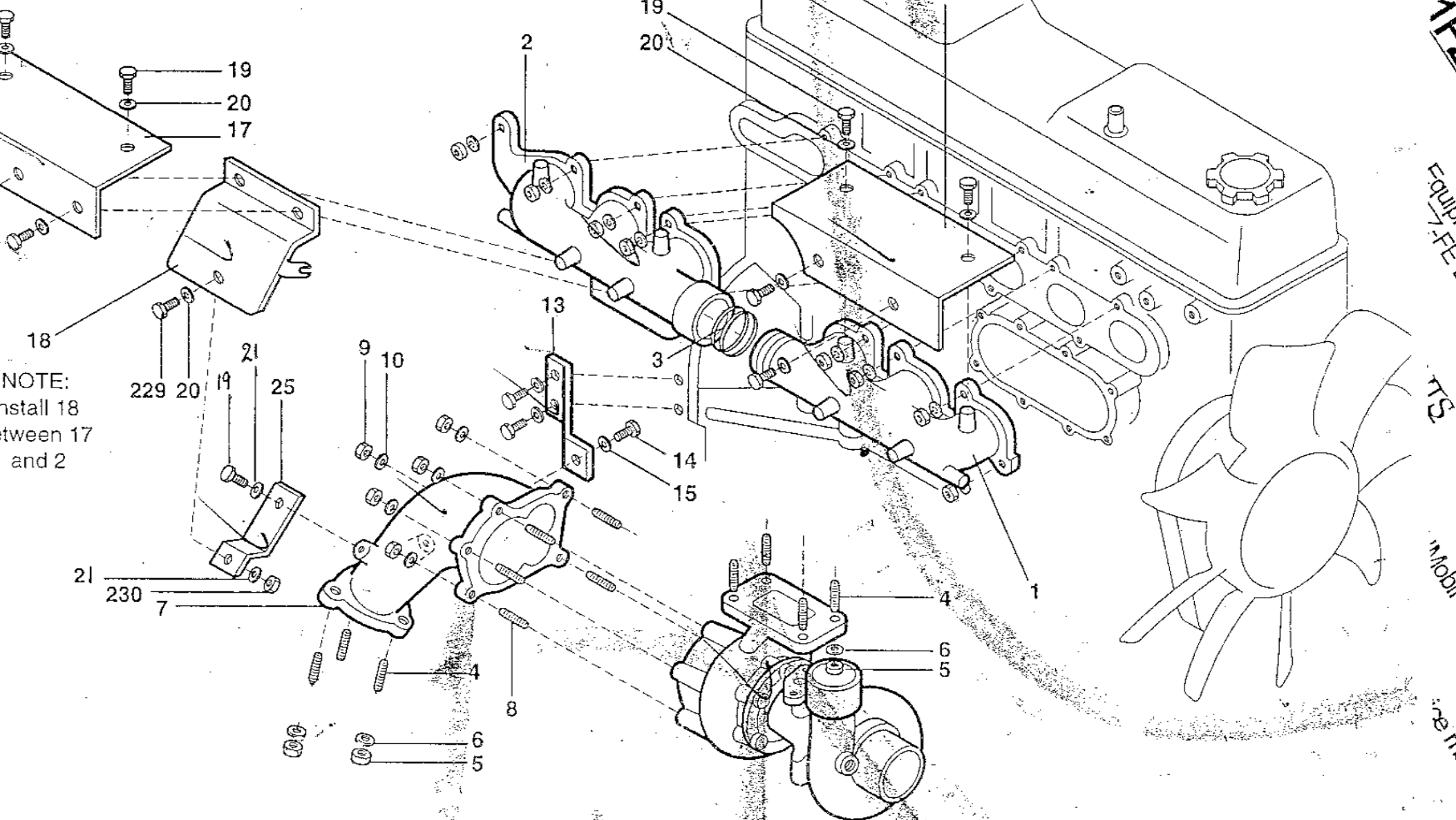
63) Re-install right front speaker and glove box.

64) Install supplied "Premium Unleaded Only" sticker to inside of fuel door. Install supplied "Tune-up" sticker as close as possible to OEM "TUNE-UP Spec Sticker"

65) Visually inspect all areas of turbo installation. Check all fluid levels. Re-connect battery. Start engine, watch for oil pressure on gauge. Monitor vehicle for exhaust, or fluid leaks. Check automatic transmission fluid level. If 4 wheel drive chassis dynamometer is not available, road test vehicle paying particular attention to driveability. Visually re-inspect vehicle after test drive. re-check all fluid levels.

FE EXHAUST -Australia '95-on

2/12/96



NOTE:
Install 18
between 17
and 2

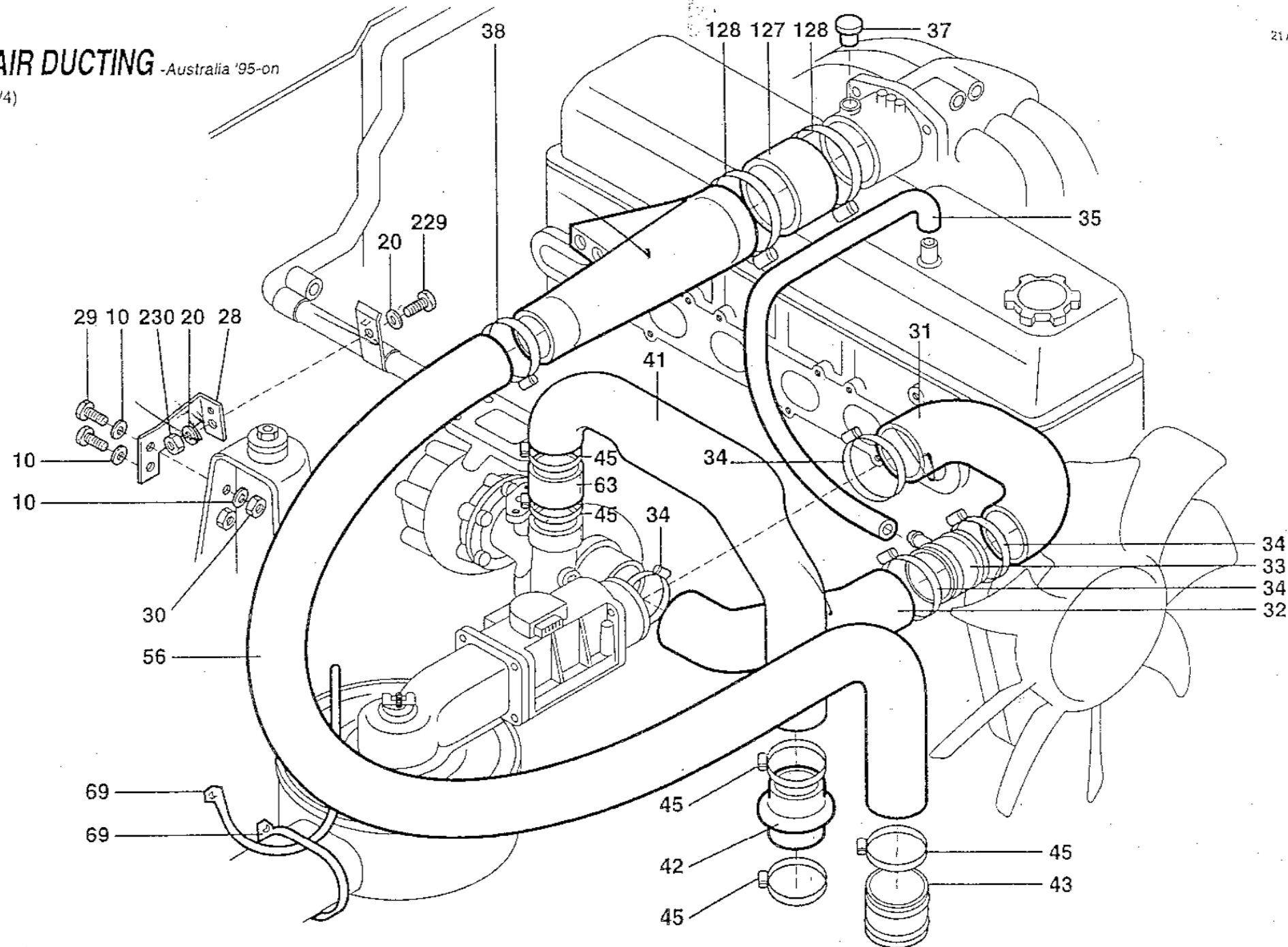
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FE AIR DUCTING -Australia '95-on

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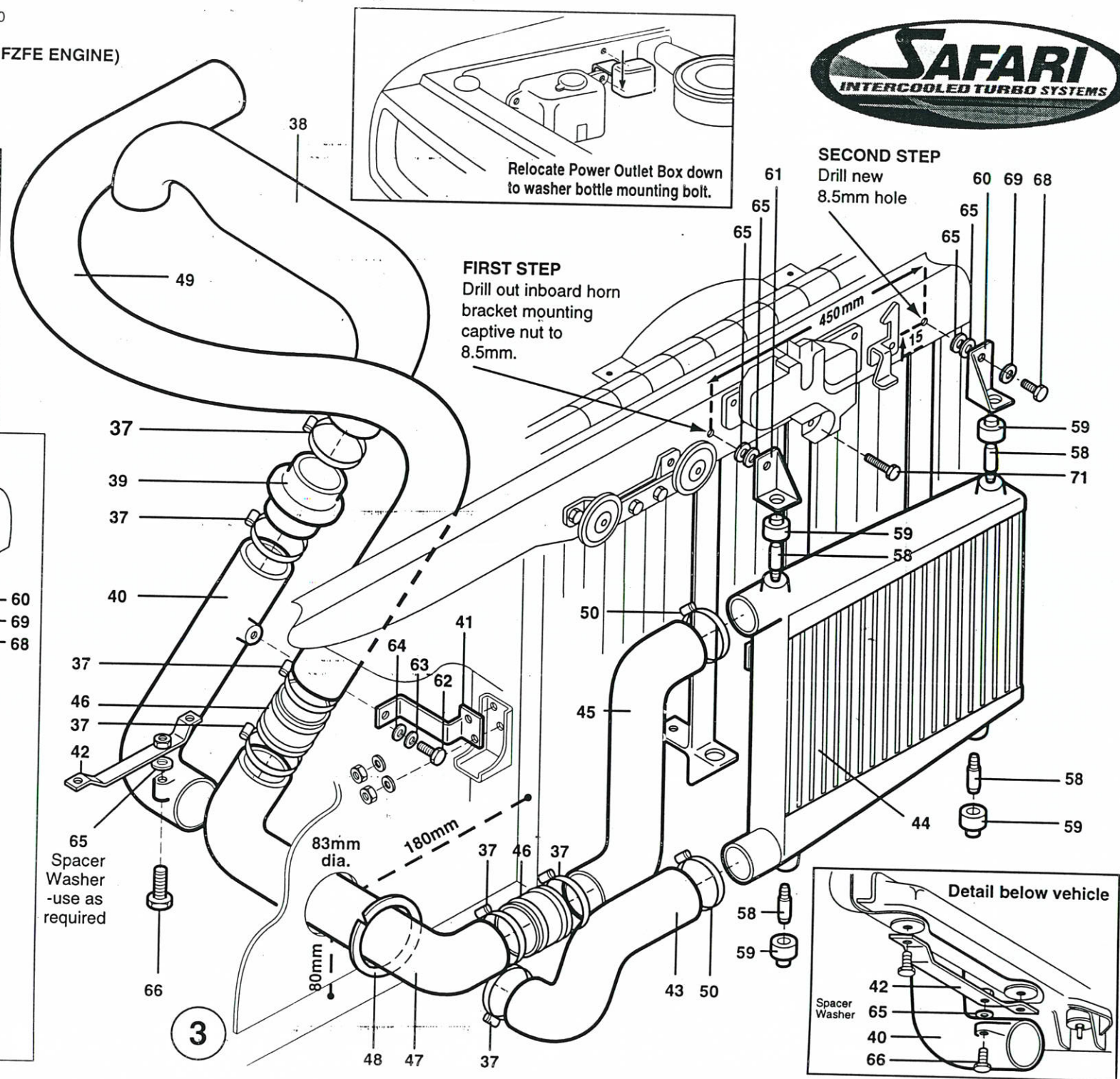
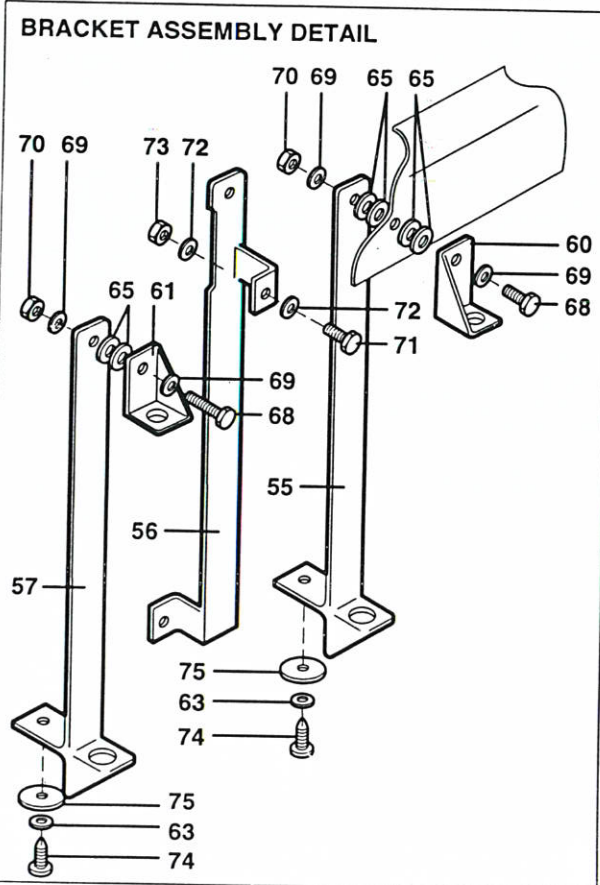
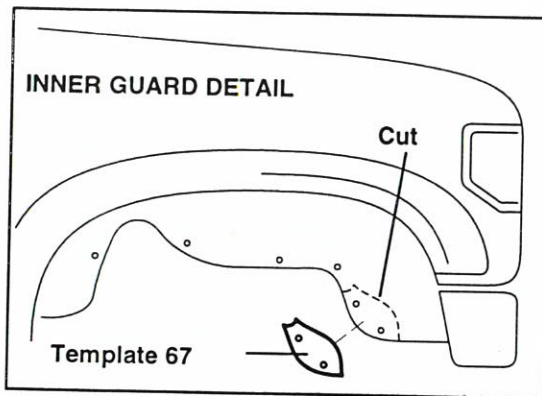
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STC1FZFE-US 28/6/00

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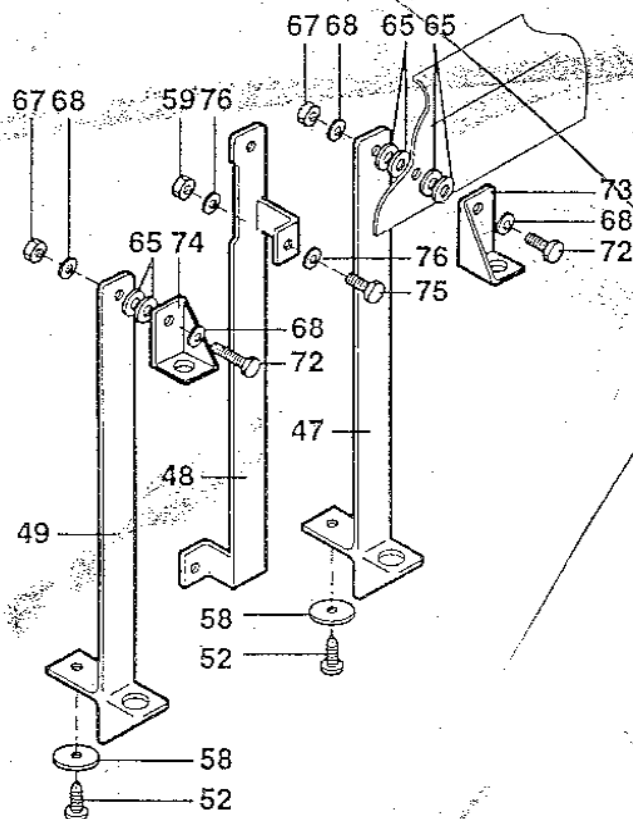
Sub Assembly: INTERCOOLING ASSEMBLY



FE INTERCOOLER Core Installation - Australia '95-on

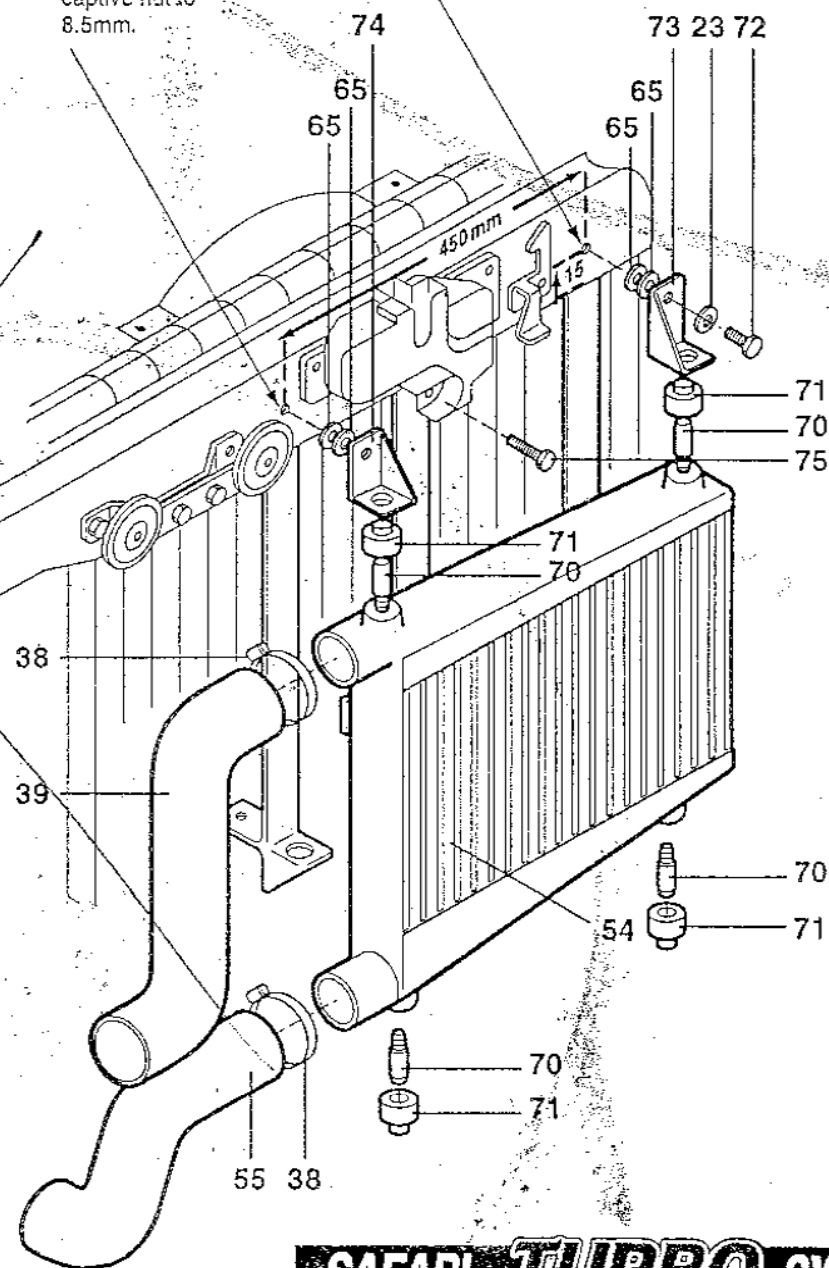
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BRACKET ASSEMBLY DETAIL



FIRST STEP
Drill out inboard horn
bracket mounting
captive nut to
8.5mm.

SECOND STEP
Drill new
8.5mm hole

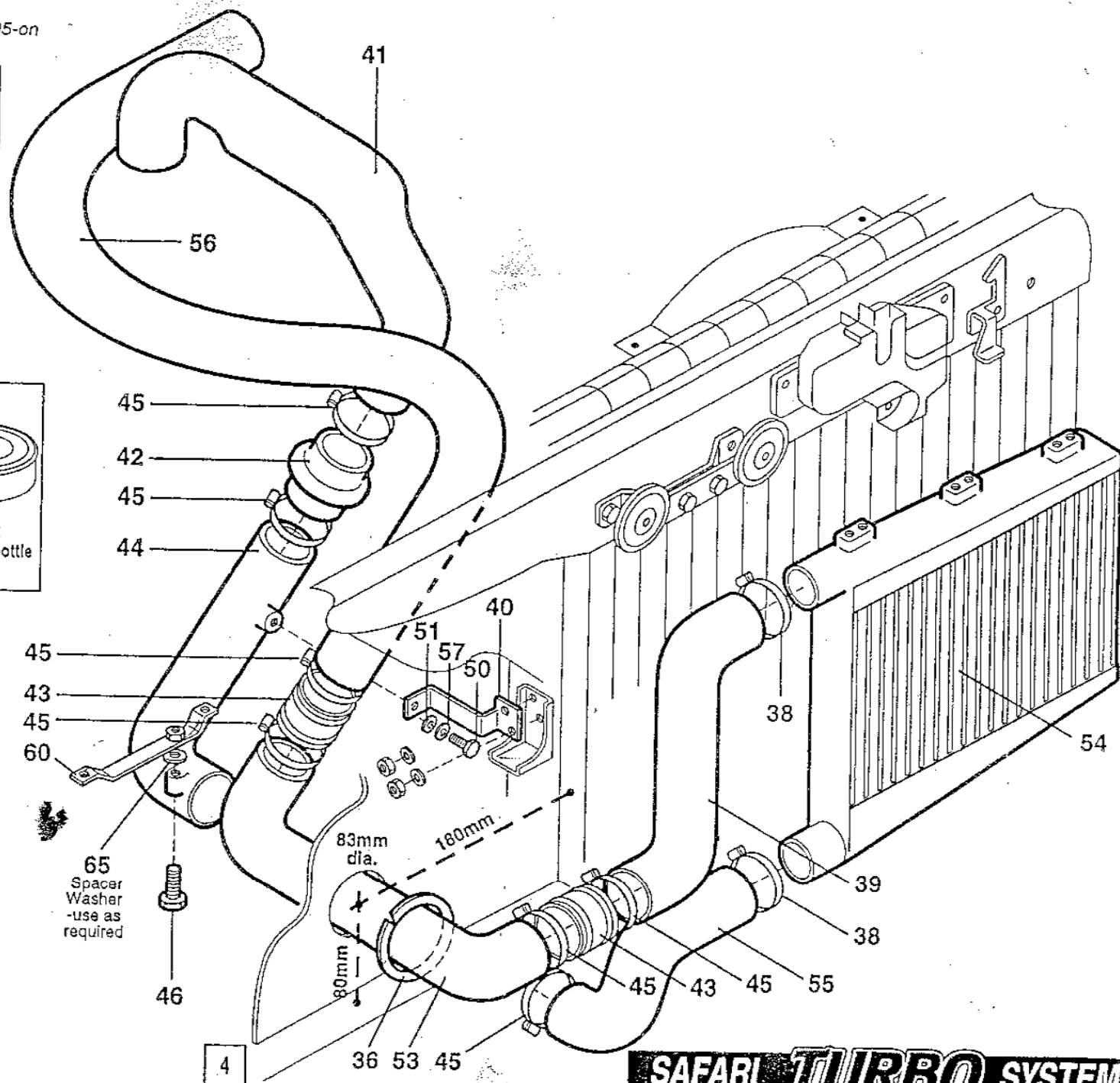
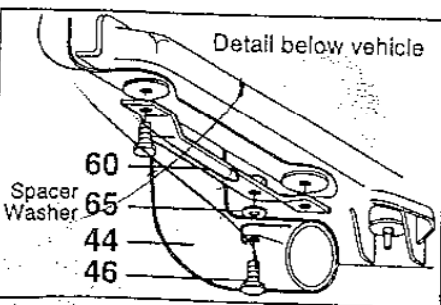
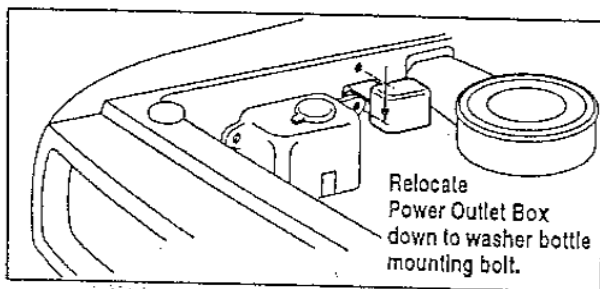
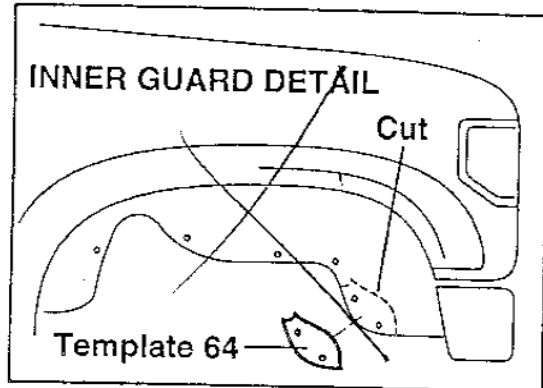


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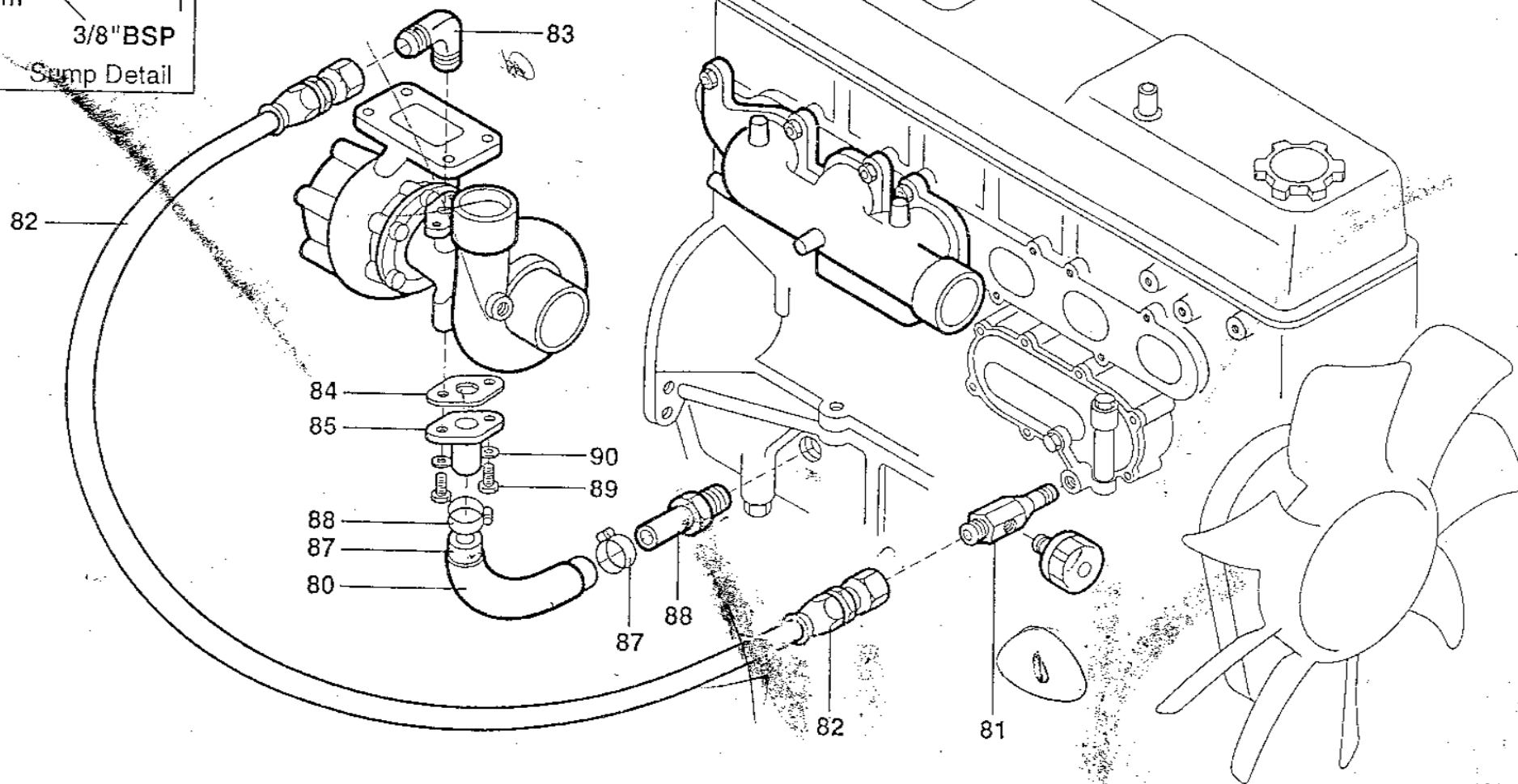
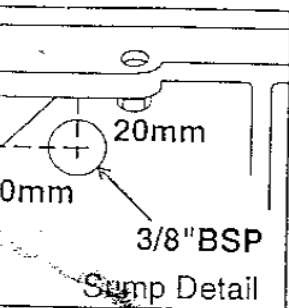
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1FZ-FE INTERCOOLER -Australia '95-on

(Ref. Pages 3/4)



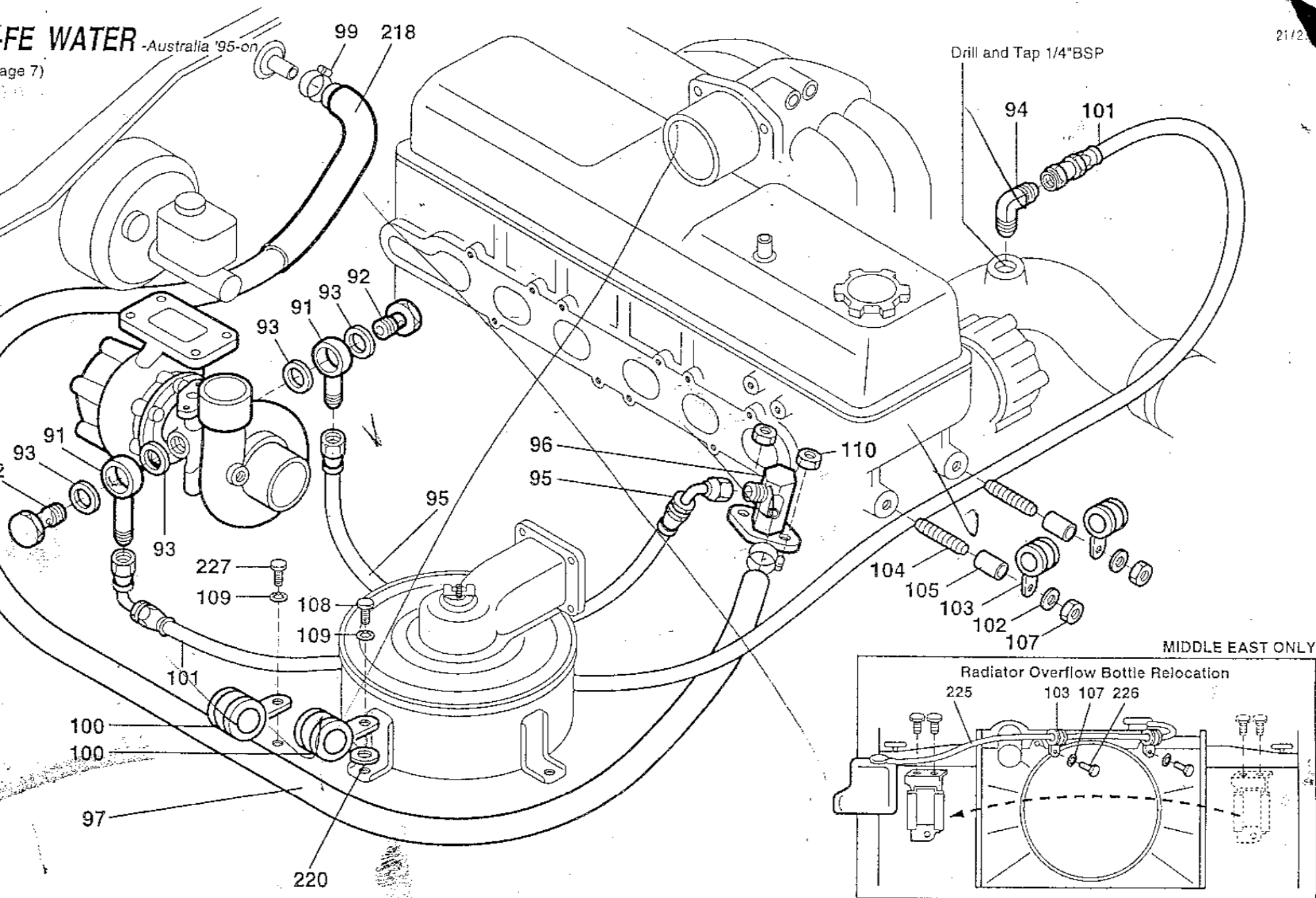
SAFARI TURBO SYSTEM



FE WATER -Australia '95-on

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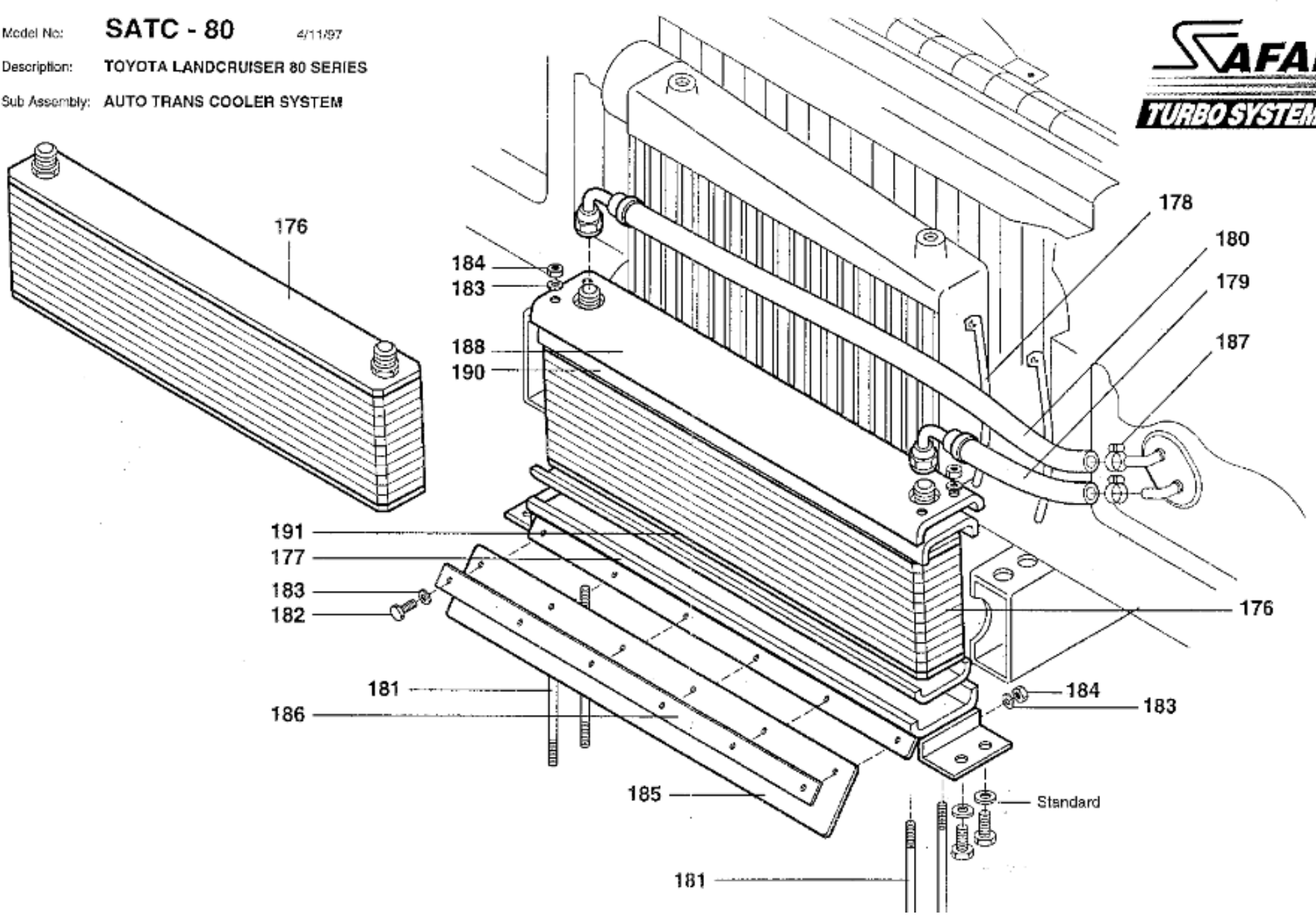
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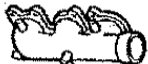
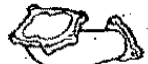
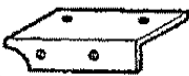
23/2/96

**SAFARI TURBO SYSTEMS**



Model No: **SATC - 80** 4/11/97
Description: **TOYOTA LANDCRUISER 80 SERIES**
Sub Assembly: **AUTO TRANS COOLER SYSTEM**



Item No.	Part	Part No.	Description	Qty.
1		380-001-000	EXHAUST MANIFOLD - Front	1
2		380-002-000	EXHAUST MANIFOLD - Rear	1
3		000-471	RING - Sealing	2
4		000-106	STUD - S/S - 10mm x 1.25 x 1.5 x 30mm	7
5		000-209	NUT - Selfloc - 10mm x 1.25	7
6		000-303	WASHER - Flat - 10mm	7
7		380-005-000	TURBINE OUTLET CASTING	1
8		000-101	STUD - 8mm x 1.0 x 1.25 x 25mm - S/S	5
9		000-208	NUT - Selfloc - 8mm x 1.0	5
10		000-302	WASHER - Flat - 8mm - Gold	8
11				
12				
13		380-011-000	BRACKET - Outlet Support	1
14		000-027	BOLT - Hex - 10mm x 1.5 x 20mm	1
15		000-306	WASHER - Star - 10mm	1
16		380-012-200	HEAT SHIELD - Front	1
17		380-012-400	HEAT SHIELD - Rear	1
18		380-012-600	HEAT SHIELD - Side	1
19		000-001-300	BOLT - Hex - 6mm x 1.0 x 12mm - s/s	9
20		000-310-300	WASHER - Body - 6mm x 16mm - s/s	9
21		000-310	WASHER - BODY 6mm x 16mm (Yellow)	2

Model No:

STC1FZFE-US

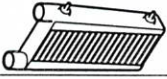
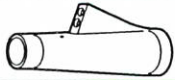
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Description:

TOYOTA LANDCRUISER 4.5L (1FZFE ENGINE)

Sub Assembly:

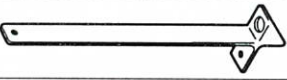
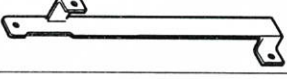
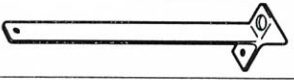
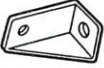
COMPRESSOR ENTRY / INTERCOOLER

Item No.	Part	Part No.	Description	Qty.
31		380-122-000	ELBOW - Silicon - 90° - 3"	1
32		380-122-200	DUCT - Silicon - Compressor Inlet	1
33		380-025-200	JOINER - Duct - 3" I.D.	1
34		000-928	CLAMP - Hose - 70 / 90mm - Silver	4
35		380-994-000	HOSE - Breather	1
36		000-803-225	HOSE - Silicon - 2 1/2" I.D. x 2 1/4"	1
37		000-926	CLAMP - Hose - 50 / 70mm - Silver	9
38		380-042-000	DUCT - Cast - Comp. Discharge	1
39		000-837-400	HUMP HOSE - 63mm I.D. x 125 mm	1
40		380-042-400	DUCT - Cast - Intercooler Inlet	1
41		380-332-400	BRACKET - Duct Mounting	1
42		380-332-000	BRACKET - Duct Mounting	1
43		375-042-250	Duct - Rubber - Intercooler Inlet	1
44		000-041-000	CORE ASSEMBLY - Intercooler	1
45		380-043-350	DUCT - Rubber - Intercooler Outlet	1
46		380-025-000	JOINER - Hose - 57mm x 65mm	2
47		380-043-250	DUCT - Rubber - Intercooler Outlet	1
48		000-953-030	EDGING - Rubber - 300mm	1
49		380-043-450	DUCT - Rubber - Throttle Body	1
50		000-927	CLAMP - Hose - 60 / 80mm - Silver	5
51		380-043-000	DUCT - Cast - Injector Mounting	1
52		000-805-225	HOSE - Silicon - 3" I.D. x 57mm	1

Model No: **STC1FZFE-US**

28/06/00

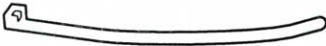
Description: **TOYOTA LANDCRUISER 4.5L (1FZFE ENGINE)**Sub Assembly: **COMPRESSOR ENTRY / INTERCOOLER (continued)**

Item No.	Part	Part No.	Description	Qty.
53		000-977	PLUG - Breather	1
54		380-332-200	BRACKET - Throttle Body Inlet Duct	1
55		375-039-050	BRACKET - L.H.S.	1
56		375-039-250	BRACKET - Centre	1
57		375-039-450	BRACKET - R.H.S.	1
58		000-148	PIN - Intercooling Mounting - 30mm	4
59		000-415	BUSH - Rubber - Intercooler Mounting	4
60		480-039-200	BRACKET - Intercooler Mounting	1
61		480-039-400	BRACKET - Intercooler Mounting	1
62		000-002	BOLT - 6mm x 1.0 x 16mm	2
63		000-304	WASHER - Star - 6mm	5
64		000-310	WASHER - Body - 6mm x 16mm	2
65		000-335	WASHER - Body - 8mm x 24mm x 3mm	7
66		000-043	BOLT - S/H - 8mm x 1.25 x 20mm	1
67		380-217-000	TEMPLATE - Inner W/A Cutout	1
68		000-015	BOLT - 8mm x 1.25 x 35mm	2
69		000-302	WASHER - Flat - 8mm - Gold	4
70		000-205	NUT - Nyloc - 8mm x 1.25	2
71		000-003	BOLT - Hex - 6mm x 1.0 x 20mm	1
72		000-301	WASHER - Flat - 6mm	2
73		000-204	NUT - Nyloc - 6mm x 1.0	1
74		000-944	SCREW - S/T - 6.5mm x 25mm	2

Model No: **STC1FZFE-US**

28/06/00

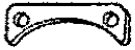
Description: **TOYOTA LANDCRUISER 4.5L (1FZFE ENGINE)**Sub Assembly: **COMPRESSOR ENTRY / INTERCOOLER (continued)**

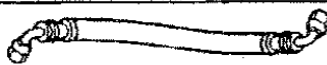
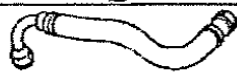
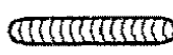
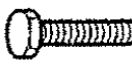
Item No.	Part	Part No.	Description	Qty.
75		000-321	WASHER - Flat - 6mm x 20mm	2
76		000-011	BOLT - 8mm x 1.25 x 16mm	2
77		000-305	WASHER - Star - 8mm	2
78		000-001	BOLT - Hex - 6mm x 1.0 x 12mm	1
79		000-983	CLAMP - Hose Support - 8 / 15mm	1
80		000-990	VALVE - One Way - 1/4"	1
81		380-086-400	SPARK PLUG - BCPR 7ES-11	6
82		000-987-290	TIE STRAP - Nylon - 290mm	3

Sub Assembly: **ENGINE MANAGEMENT**

91		UNICHIP-A	COMPUTER CTRL. MODULE (Inc. Loom)	1
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15/2/96

Item No.	Part	Part No.	Description	Qty.
191		000-063-500	CHRA - T-3 / T-4 - 56 Trim	1
192		000-062-400	COMPRESSOR HOUSING - T-4	1
193		000-061-599	TURBINE HOUSING .82 A/R - N/R	1
194		000-036	BOLT - 8mm x 1.25 x 12mm	6
195		000-037	BOLT - 8mm x 1.25 x 16mm	6
196		000-065-200	CLAMP - Compressor - T-4	2
197		000-064-000	CLAMP - Turbine	2
199		330-068-000	BRACKET - Actuator	1
200		000-066-400	ACTUATOR - T3 - 6 PSI	1
201		000-808-026	HOSE - 1/4" x 260mm	0.26M
202		000-585	BARB - 90° - 1/8"NPT x 1/4"barb	1
203		000-235	NUT - Hex - 1/4"UNF	3
204		000-067-900	ROD - Actuator - 112.5mm x 1/4"UNF	1
205		000-940	CLIP - 'C' - 5.5mm	1
206		000-304	WASHER - Star - 6mm	2
207		000-917	CLAMP - Hose - Spring	2
208		000-011	BOLT - 8mm x 1.25 x 16mm	2
209		000-305	WASHER - Star - 8mm	3

Item No.	Part	Part No.	Description	Qty.
91		000-071-900	BANJO - 9/16" JIC - Adaptor	2
92		000-949	BANJO BOLT - 18mm x 1.5mm	2
93		000-316	WASHER - Copper - 18 x 24mm	4
94		000-658	ADAPTOR - 90° - 1/4"BSP x 9/16"JIC	1
95		380-072-000	HOSE ASSY. - Water - Inner - 580mm	0.58
96		380-966	ADAPTOR - Heater Hose	1
97		380-846-185	HOSE - Heater - 5/8" I.D. x 1850mm	1.85 M
99		000-901	CLAMP - Hose - 16 / 25mm - Silver	2
100		000-932	CLAMP - Hose Support - 25 / 20mm	2
101		375-072-000	HOSE ASSEMBLY - 3/8" x 1200mm	1.2 M
103		000-931	CLAMP - Hose Support - 15 / 20mm	2
104		000-118	STUD - 8mm x 1.25 x 40mm	2
105		000-992	SPACER - 8mm I.D. x 15mm lg.	2
106		000-205	NUT - Nyloc - 8mm x 1.25	2
107		000-302	WASHER - Flat - 8mm - Gold	3
108		000-015	BOLT - 8mm x 1.25 x 35mm	1
109		000-305	WASHER - Star - 8mm	6
110		000-211	NUT - Selfloc - 8mm x 1.25	2
218		000-993-030	FIRE SLEEVE - 7/8" I.D. x 300mm	0.3M
220		000-311	WASHER - Body - 8mm x 30mm	1
227		000-012	BOLT - 8mm x 1.25 x 20mm	1
228		000-987-190	TIE STRAP - Nylon - 190mm	5

SATC-80.xls 201197

PACKING LIST

PRODUCT CODE : SATC-80

DESCRIPTION : 80 SERIES AUTO TRANS. COOLER SYSTEM

COMPLETE SYSTEM

SERIAL NO:

PACKING NO.

PART NO.	DESCRIPTION	QTY
SATC-80	COMPLETE SYSTEM	
SATC-80 P100	SMALL PARTS BOX	1
380-051-650	BRACKET - Cooler Mounting Bottom	1
380-038-300	STRAP - Support	1
380-051-700	BRACKET - Cooler Mounting Top	1
000-055-200	COOLER - Transmission Oil	1

PACKING LIST

SERIAL NO:

PRODUCT CODE : SATC-80 P100

DESCRIPTION : 80 SERIES AUTO TRANS. COOLER SYSTEM

PACKING NO.

P100 - SMALL PARTS BOX

PART NO.	DESCRIPTION	QTY
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SATC-80 P01	SMALL PARTS BAG	
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181	000-121	STUD - 6mm x 1.0 x 160mm	4	
182	000-004	BOLT - Hex 6mm x 1.01 x 25mm	6	
183	000-301	WASHER - Flat 6mm	16	
184	000-204	NUT - Nyloc 6mm x 1.0	10	
	000-920	CLAMP - Hose 10/16MM Silver	2	
	000-987-178	CABLE TIE - 4.8mm x 178mm	2	

SATC-80 P100	SMALL PARTS BOX	
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SATC-80 P01	SMALL PARTS BAG	1	
380-809-350	HOSE ASSY - 1 x 90° barb 3/8" I.D. x 350mm	1	
380-809-850	HOSE ASSY - 1 x 90° barb 3/8" I.D. x 850mm	1	
380-038-200	FLAP - Rubber 100mm x 6mm	1	
380-410-200	RUBBER Isolation strip 80mm x 615mm	1	
380-410-300	RUBBER Isolation strip 80mm x 615mm	1	

1FZ-FE - TOYOTA LANDCRUISER

Luxon's 4WD Equipment P/L recommend the following maintenance procedures for your 1FZ-FE Landcruiser equipped with a Safari Turbosystem.

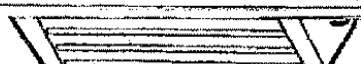
1. SERVICE REQUIREMENTS

- a) Engine Oil - we recommend the use of 'Mobil One', which is to be replaced at 5,000km intervals.
- b) Filters - use genuine filters only and replace as per service manual.
- c) Cooling System - to be kept in peak condition.
- d) Auto Transmission - to be serviced every 20,000km.

2. TUNING REQUIREMENTS

- a) Spark Plugs - we recommend the use of 'NGK Spark Plugs' (Part No.BCPR7ES-11), which are to be replaced at 20,000km intervals.
- b) Filters - use genuine filters only and replace as per service manual.
- c) Fuel - we recommend the use of Premium Unleaded petrol, only.
- d) Ignition Timing - 3° BTDC

IMPORTANT NOTE : DO NOT ALTER TURBOCHARGER BOOST, AS THIS MAY RESULT IN ENGINE DAMAGE.





COOLANT BOSS



COOLANT FEED



COOLANT NECK



ENGINE FRONT



OIL RETURN LINE



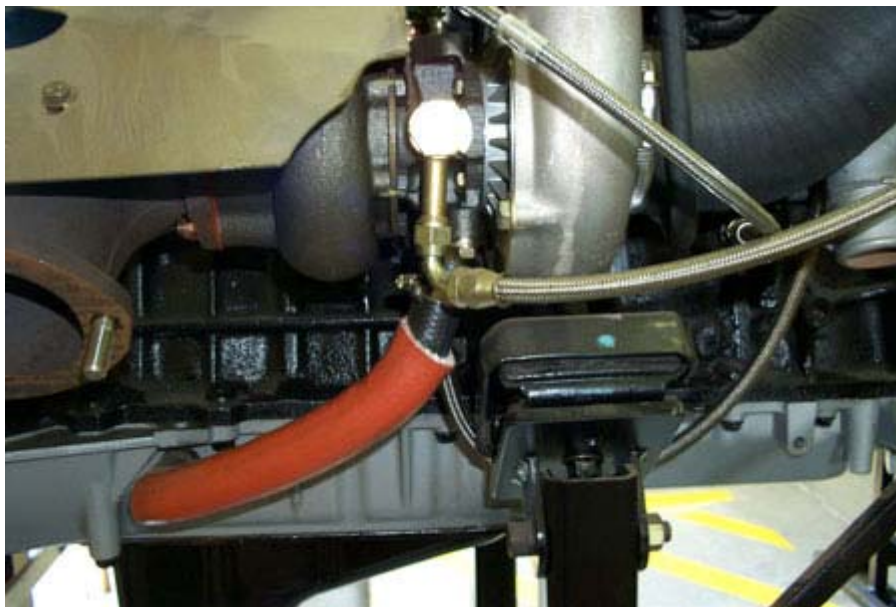
OIL TEE



THERMOSTAT FITTING



THERMOSTAT



TURBINE SIDE