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if it's diesel injection or turbo DENCO DO IT.

FITTING INSTRUCTIONS

TOYOTA BJ73 WITH S1BG 313798

AS AT 29 Apr. 08

1. Using Schwitzer S1BG turbocharger with integral waste-gate
Remove air inlet pipe from air cleaner to venturi.
2. Remove front section of exhaust pipe at first joint and manifold.
3. Remove exhaust manifold and refit Denco manifold with turbo and new exhaust gaskets.
4. Remove oil return banjo bolt from block where oil is returned from vacuum pump.
5. Fit return fitting on engine block and connect oil return from turbo to block. Tighten clamps.
6. Remove plug from oil gallery on engine block on rear RHS and connect oil supply to turbo using fittings and high pressure hose.
WARNING DO NOT ALLOW OIL SUPPLY HOSE TO CONTACT HEAT SOURCES OR SHARP EDGES.
7. Connect turbo outlet to venturi using crossover pipe, turbo hose, TD3L001 and clamps.
8. Re-locate power steering reservoir to RHS using bracket and spacer (lower leg of reservoir to be cut off). Stainless steel heat shield fits on reservoir leg closest to turbo to protect plastic clutch reservoir.
9. Fit exhaust outlet to turbo. Connect to exhaust system (not supplied).
10. Connect air cleaner to turbo inlet using 45° casting and convoluted hose

11. Adjust maximum fuel screw on pump to obtain a maximum pyro temperature of 500°C at full load.
12. Make sure that waste gate actuator has at least ½ hole pre-tension and check that boost is set to 50KPA full load.
13. If pyrometer is available set fuel so as not to exceed 500°C full load conditions.

WARNING TO ALL FITTING STATIONS

INSTALLATION OF DIESEL TURBOCHARGER EMISSION CONTROL SYSTEMS SHOULD NOT BE UNDERTAKEN UNLESS YOU HAVE A BOOST GAUGE AND A PYROMETER.

ALL DENCO TURBO SYSTEMS RUN AT 50 KPA BOOST MAXIMUM AND A MAXIMUM OF 500°C UNDER POWER LOAD UNLESS OTHERWISE STATED.

REMEMBER OVER FUELING NOT ONLY CAUSES BLACK SMOKE IT ALSO GENERATES EXCESS HEAT. EXCESS HEAT CAN ALSO BE CAUSED BY AIR AND EXHAUST RESTRICTIONS SO CHECK ALL AIR CLEANERS AND DUCTING TO THEM FOR RESTRICTIONS BEFORE TESTING. EXHAUST BRAKES AND EXHAUST SYSTEMS SHOULD ALSO BE CHECKED FOR CORRECT OPERATION AND RESTRICTIONS.

EXCESS HEAT CAUSES MANY PROBLEMS INCLUDING HIGH NO_x EMISSIONS, LAMINATION OF TURBINE HOUSING AND MANIFOLD, STUD STRETCH AND PREMATURE ENGINE FAILURE.

DENCO DIESEL AND TURBO WILL NOT ACCEPT LIABILITY FOR ANY PARTS RETURNED FOR WARRANTY THAT SHOW ANY OF THE ABOVE SIGNS.

WARRANTY WILL NOT BE CONSIDERED IF REPAIRS ARE CARRIED OUT WITHOUT DENCO DIESEL AND TURBO'S AUTHORISATION.

ALL KITS NOW HAVE DUMP PIPES WITH THE PROVISION FOR VDO PYROMETERS.

REMEMBER: IF SET CORRECTLY OUR PRODUCT IS ENVIRONMENTALLY FRIENDLY AND SAFER TO THE ENVIRONMENT THAN PETROL ENGINES.

**PARTS LIST AS AT 26 FEB 04 FOR
TOYOTA BJ73 WITH S1BG 313798**

ITEM	QTY	PART NO.	BIN	DESCRIPTION	CHECK
1	1	313798		S1BG turbo with integral waste gate	
2	1	TDM325		BJ73 manifold	
3	1	826.0651	U49	8*20mm bolt, 5 flat & 1 s/washer	
4	1	311698		Turbo base gasket	
5	1	TDC223010	A10	BJ oil out swivel pipe	
6	1	TDM068		Aluminium sleeve S1end	
7	1	SP3-0407	X5	Fitting ¼*7/16 UNS	
8	2	MS8241	X2	¼" hose clips	
9	8"	80-025	W7	¼" per inch of Purosil hose	
10	4	TDM010	X18	8mm incanol studs	
11	4	03652	X17	8mm locknuts	
12	1	TDM061		TDS1 flange plate (Aust only)	
13	3	826.0652	U50	M8*25 bolt (Aust only)	
14	2	826.7170	X11	8mm s/washers (Aust only)	
15	1	6020-002	D19	3" v clamp (Aust only)	
16	2	826.0650	X12	M8*16 bolt (Aust only)	
17	4	DSF 051		BJ manifold gasket DSF 051	
<u>Air Out</u>					
18	1 1	TDM160 A71-0208		9"*2" dia crossover pipe with 1/8 BSP tank collar & to exp 2 ½" one end	
19	1	TDM154		Aluminium elbow TD3L001	
20	2	670BLK-250	V4	2"*2 ½" turbo hose	
21	4	HS040P	HCB11	No 40 hose clamps	
22	1	670BLK-200	V2	2" * 2" turbo hose	
23	2	HSO32P	HCB9	No 32 hose clamps	
24	1	A64-02	T15F	1/8 BSP plug (no 64)	

25	1	670BLK-225	V3	1" * 2 ¼" hose fitted to manifold inlet	
<u>Air In</u>					
26	1			45° x 2 ½" casting	
27	1	670blk-250		2 ½" x 2 ½" hose	
28	3	HS040		No 40 hose clamps	
29	1	HS044		No 44 hose clamp	
30	1	CVRH63-70		Convolute hose 5 ½" long	
<u>Oil in</u>					
31	1	A25-02		1/8M*1/8F 90° fitting 25E	
32	1	A7-0402	T11	1/8 to DASH 4 fitting	
33	1	HOS36		Oil in hose 36" long	
<u>Oil out</u>					
34	1	TD80*270*16		5/8 x 90° oil hose	
35	1	PRE162	G8R	5/8* 14mm adaptor	
36	2	NW543		Copper Washers	
37	2	HS10		No 10 Hose Clamps	
<u>Exhaust</u>					
38	1	TDM157		BJ73 Dump pipe TDS1DP	
39	1	TDM164		Dump pipe for Japan	
40	3	826.7082	X14	8 x 25 bolt and s/s washers (Japan)	
41	2	0082 8 25		8 x 25 cap screw (Japan)	
<u>Power Steering Reservoir Relocation Bracket</u>					
42	1	TDM161		Fire Wall Bracket	
43	1	TDM162		70 x 19mm Tube Spacer	
44	1	826.0670	U59	8 x 100mm bolt	
45	1	826.6201	U68	8mm nut	
46	2	826.7004	U90	8mm flat washers	
47	1	826.7170	X11	8mm spring washers	
48	1	TDM163		S/s heat shield drilled with 2 holes for protection of clutch master cylinder	
<u>For Models with power assist clutch.</u>					
49	1			6" x 12" heat wrap for	

				booster	
50	1	HSO104P		No 104 Hose Clamp	
<u>Miscellaneous</u>					
51				Stickers	
52				Warranty Forms	
53				Fitting Instructions	



