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

FITTING INSTRUCTIONS

FOR JAPAN TOYOTA PZ 73

WITH 1PZ (5 CYLINDER MOTOR)

1. Drain oil and disconnect and remove oil level sender from sump.
2. Remove the exhaust system as required.
3. Remove exhaust manifold and fit two new manifold gaskets.
4. Fit turbo and manifold assembly using new one cylinder manifold and sealing rings.
5. Mark sump for oil return pipe, then remove sump from vehicle. Drill and weld pipe into sump in alignment with turbo oil drain. Re-fit sump and connect oil drain to turbo using a small piece of $\frac{3}{4}$ hose and clamps provided. Fit level sender and refill with oil.
6. Remove oil sender near starter motor and replace with items 15, 16 and 17. Re-fit oil sender to top of T but backing back slightly. Now connect oil to turbo with flex oil hose. Support oil line with bracket and clamps provided.
7. Connect turbo outlet to engine crossover pipe using 2 and 2 $\frac{3}{4}$ turbo hose and cast HZ001 turbo air out pipe.
8. Remove engine breather rubber pipe from rocker cover and crossover pipe and discard. Blank crossover pipe breather with $\frac{5}{8}$ cap plug and hose clamp.
9. Fit 2 $\frac{3}{4}$ " turbo hose to the inlet of the turbocharger, and then fit HZ03 cast elbow with the short end facing the turbocharger. Cut the short end off the original convoluted air cleaner rubber hose making certain that you leave enough flat sealing area for a hose clamp to seal.

Please note: Longest section of the hose to be retained while the short end can be disregarded. Fit the modified hose to the aluminium elbow 4M403, now connect to the air cleaner top using the short aluminium HZ002B and 2 ¾" turbo hose and clamps.

10. Connect rocker cover breather to the fitting in the lower elbow HZ03.
11. Connect turbo exhaust dump pipe to turbine using V-clamp.
12. Prime turbo with oil and reconnect oil hose.
13. Fit boost gauge and pyrometer.
14. Start engine and allow it to idle for 5 minutes after oil pressure has been attained and check for leaks.
15. Open fuel 2 segments of clock inwards (i.e. From 12 o'clock to 2 o'clock).
16. Road test and adjust maximum boost to 50KPA and exhaust gas temperature maximum 550°C under full power load.

**WARNING TO ALL FITTING STATIONS
AS AT NOVEMBER 2004**

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

ALL DENCO DIESEL SYSTEMS RUN AT 50 KPA BOOST MAXIMUM AND A MAXIMUM OF 550°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 BEFORE TESTING. EXHAUST BRAKES AND EXHAUST SYSTEMS SHOULD ALSO BE CHECKED FOR CORRECT OPERATION AND RESTRICTION.

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

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

WARRANTY WILL NOT BE CONSIDERED IF REPAIRS CARRIED OUT WITHOUT DENCO DIESELS 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.

CHECK LIST						
PRE-ASSEMBLY OF FOLLOWING:						
NO	QTY	CHECK	PACK	PART NO.	CHECK/ UNPACK	DESCRIPTION
1	1			313687-41		Schwitzer S2A turbocharger with hi-flow turbine housing and actuator.
	1			TOY1HZ		Turbo Dynamics twin pulse manifold
	4 4			00-106 3667		10mm Incanol Studs 10mm x 1.25 Lock Nuts
	1			3LD1 SP8- 450504		Bronze oil in fitting ¼ BSP x 5/16 fitting
	4 4			826.0651 826.7172		8mm x 20mm bolt 8mm Spring Washer
	1			TDM		1HZ oil out pipe
	1			0602-002		V clamp (exhaust out)
2	2			DSF82		Manifold Gasket
3	1			TDM197		1PZ one cylinder manifold adaptor
AIR IN						
4	1			670BLK-275		2 ½" X 2 ¾" turbo hose
5	4			HS044P		No 44 Hose clamps
6	1			HZ03		Cast elbow with breather fittings
7	1			HZ002-A		Cast elbow
8	1			670BLK-275		2 ½" of 2 ½" turbo hose

9	2			HS044P		No 40 Hose clamps
AIR OUT						
10	1			670BLK-200		2" x 2" turbo hose
11	2			HS032P		No 32 Hose clamps
12	1			670BLK-275		2 1/2" x 2 3/4" turbo hose
13	2			HS044P		No 44 Hose clamps
14	1			TDM198		1PZ Cast turbo air out pipe
15	1			A64-02		Boost gauge plug
OIL IN						
16	1			TDM005		Oil line support brackets
17	1			A35-02		1/8 BSP brass T piece
18	1			A8-0502		5/16 x 1/8 BSP flare male elbow
19	1			A27-02		1/8 x 1/8 BSP hex union
20	1			HOS32		Oil line supply
21	2			542 12 15		12 x 15 pipe clamps
22	1			542 18 15		18 x 15 pipe clamps
23	1			57612		13 x 5mm bolt
24	1			36805		5mm Nylok nut
25	1			826 0602		6mm x 20 bolt
26	1			826 6034		6mm Nylok nut
OIL OUT						
27	1			TDM106		1HZ oil out elbow sump
28	1			LOL-12		3/4" x 6" oil hose
29	2			HS010P		No 10 Hose clamps
ENGINE BREATHER						
30	1			NG-FS6069		5/8 cap plug
31	3			HS010P		No 10 Hose clamps
32	1			LOL-10		5/8" oil hose x 17" long
EXHAUST						
33	1			TDM199		Turbo exhaust dump pipe
EXTRAS						
34	1			TDSTI		Stickers and information

