



INTER COOLER

NISSAN
NEW FAIRLADY Z

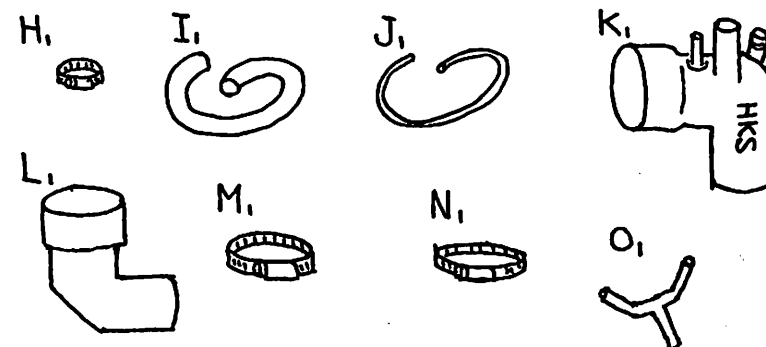
300ZX VG30ET
INSTALLATION MANUAL

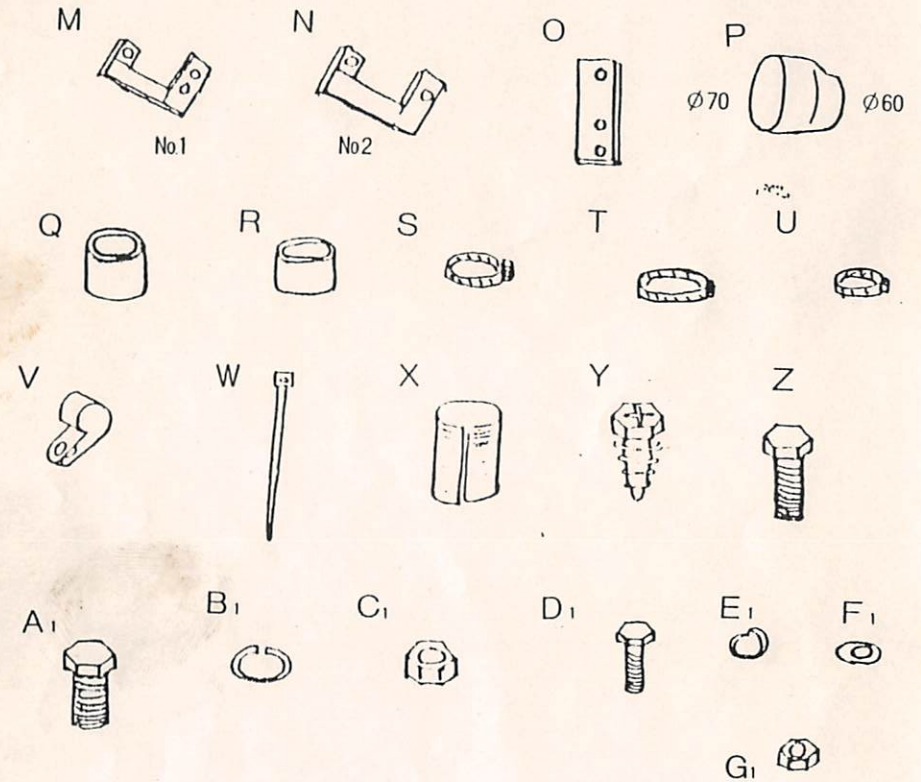
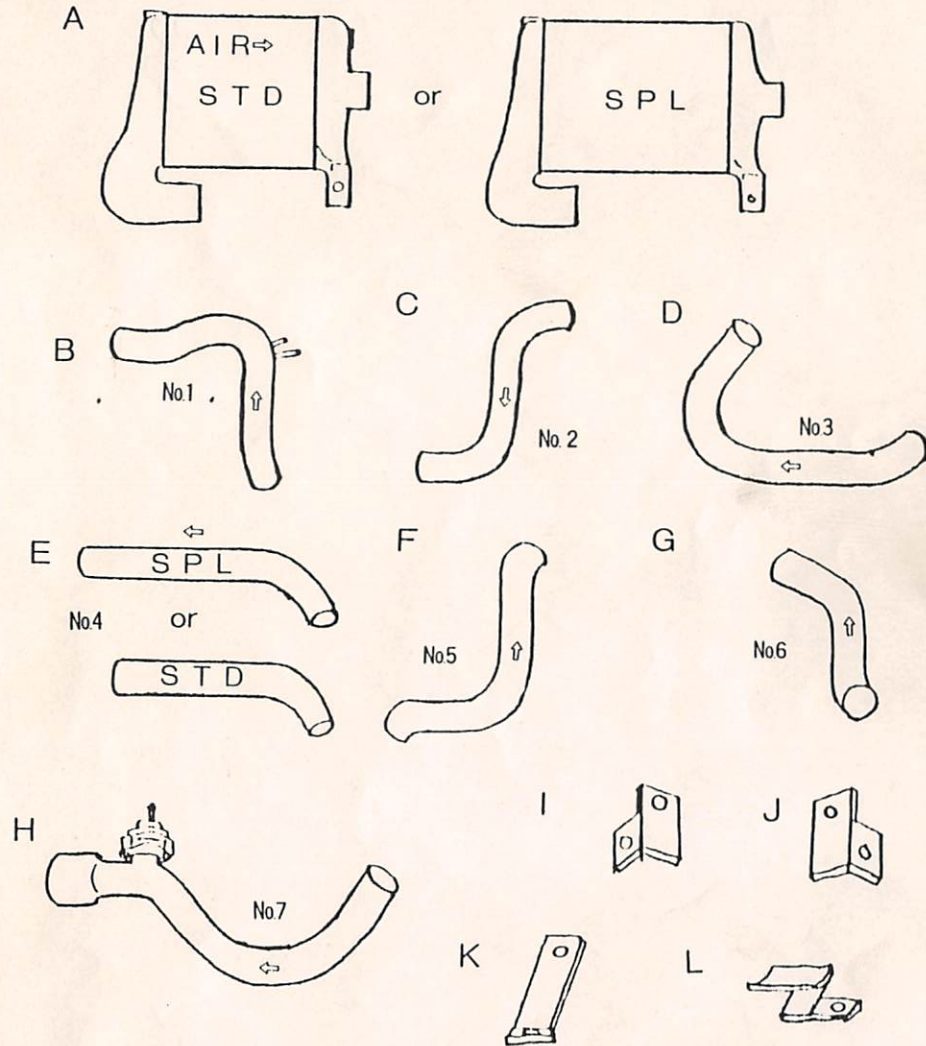
This HKS INTERCOOLER KIT has been developed for
NISSAN VG30ET of 300ZX.

PARTS LIST

NO.	DESCRIPTION	QTY
A	Intercooler Unit (STD. or SPL.)	1
B	Intercooler Pipe No.1	1
C	Intercooler Pipe No.2	1
D	Intercooler Pipe No.3	1
E	Intercooler Pipe No.4	1
F	Intercooler Pipe No.5	1
G	Intercooler Pipe No.6	1
H	Intercooler Pipe No.7	1
I	Intercooler Stay No.1	1
J	Intercooler Stay No.2	1
K	Intercooler Stay No.3	1
L	Intercooler Pipe Stay	1
M	Air/Con Fan Stay No.1	2
N	Air/Con Fan Stay No.2	1
O	VCM Valve Stay	1
P	Joint Hose	1
Q	Joint Hose 50φ l=70mm	8
R	Joint Hose 50φ l=55mm	1
S	Hose Band #36	17
T	Hose Band #40	1
U	Hose Band #28	1
V	Clamp	2
W	Tie Wrap	6
U	Thermo Tube	1
Y	Tapping Screw	2
Z	Bolt M8-1.25 l=15mm	3
A ₁	Bolt M8-1.25 l=20mm	3
B ₁	M8 Spring Washer	6
C ₁	M8 Nut	3
D ₁	Bolt M6-1.0 l=10mm	5
E ₁	Spring Washer M6	7
F ₁	Flat Washer M6	5
G ₁	Nut M6	3

NO.	DESCRIPTION	QTY
H ₁	Hose Band 22φ	2
I ₁	Hose 4φ l=50cm	1
J ₁	Hose 22φ l=50cm	1
K ₁	Suction Pipe (Aluminum)	1
L ₁	Suction Hose 60φ-70φ	1
M ₁	Hose Band #40	1
N ₁	Hose Band #48	1
O ₁	Three Way Joint 4φ	1





1. REMOVAL OF PARTS

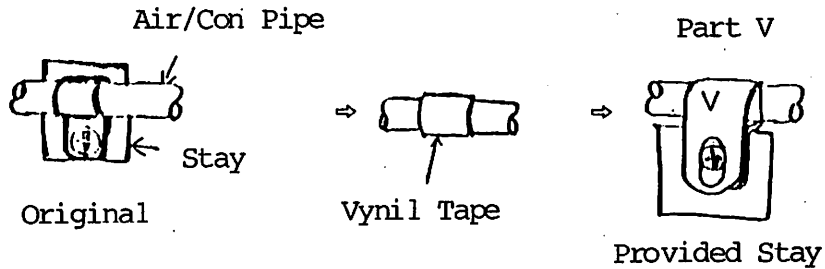
- Remove cable from negative terminal of battery.
- Remove the front grill under the bumper.
- Remove the stay of electric fan (Air/Con).
- Remove the clamp fixing air/con pipe to the condenser.
- Remove the cover of thermo sensor fitted behind the front bumper.



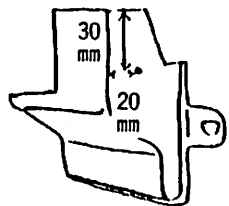
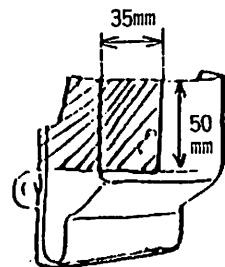
Thermo Sensor Cover

2. INSTALLATION OF INTERCOOLER UNIT

- a. Plumbing of air/con pipe must be changed. Replace the original clamp removed in Procedure 1 with provided one as shown.

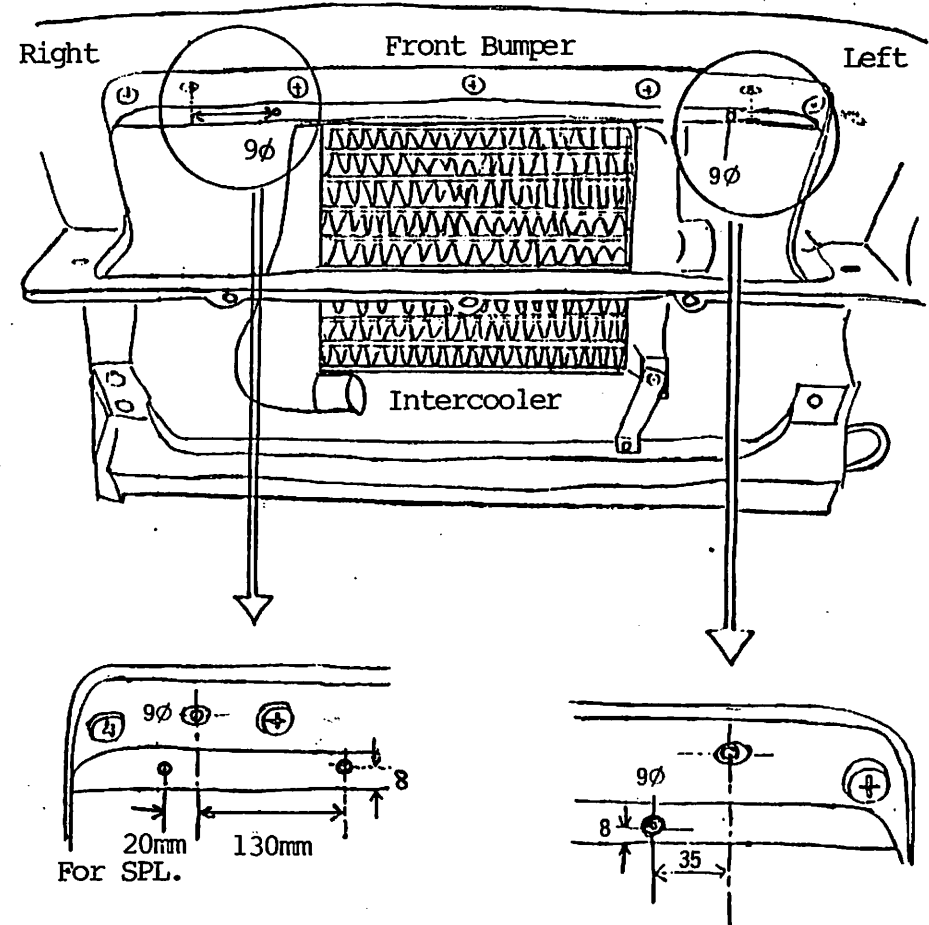


- b. Modify the cover removed in Procedure 1 as shown.



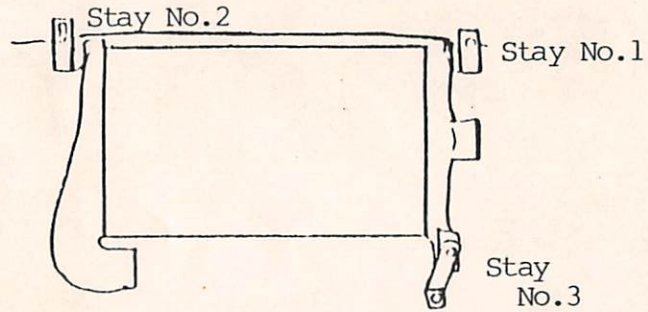
Drill a hole 6ϕ at indicated place. The thermo sensor will be fitted to the hole and the cover will be fitted on the bumper.

- c. Drill a hole at the lower part of bumper for installation of the intercooler unit.

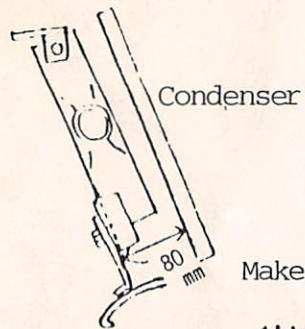


** Left-hand side hole will be the datum point. For SPL intercooler, left-hand side hole must be drilled, instead.

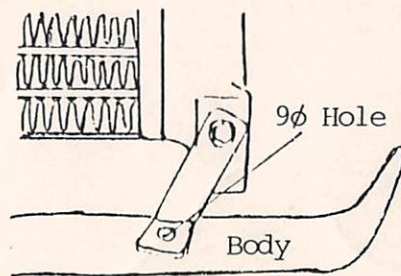
- d. Fix the stay No.1, 2, 3, to the intercooler unit, then fit the intercooler to the holes on the bumper. The intercooler unit is fitted by two stays.



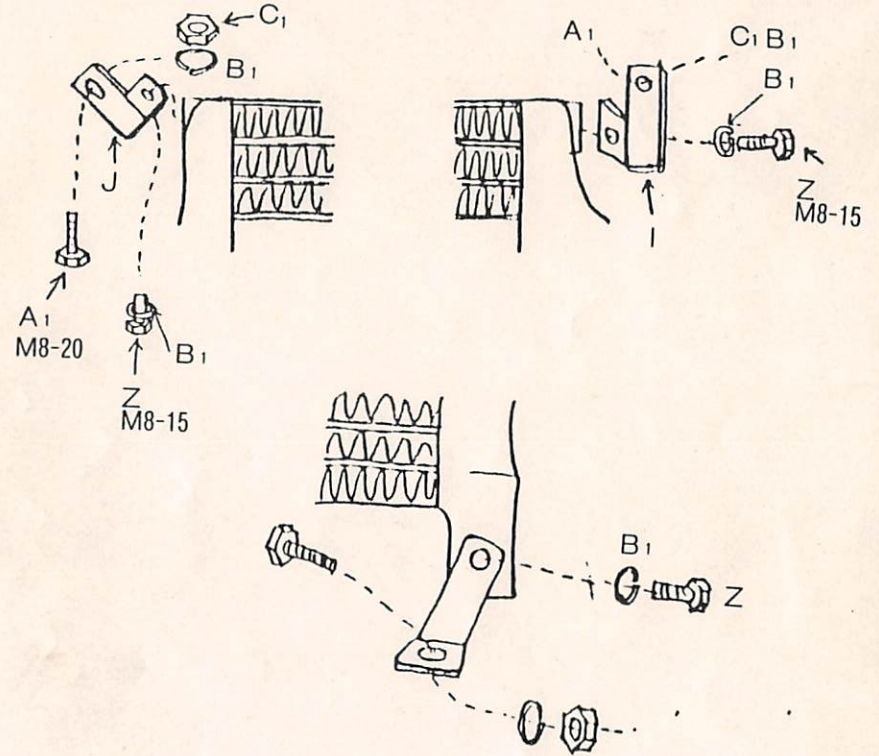
- e. Drill a hole for Stay No.3.



Make sure to keep 80mm clearance.

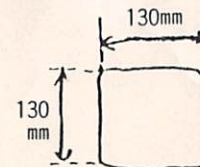


- f. Fix the intercooler unit with provided bolts M8.

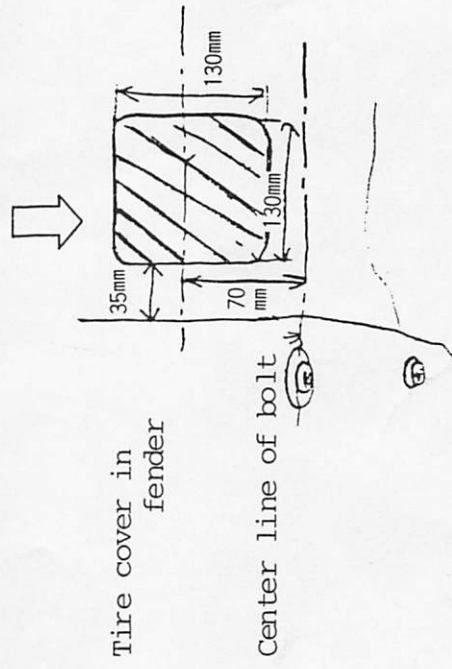
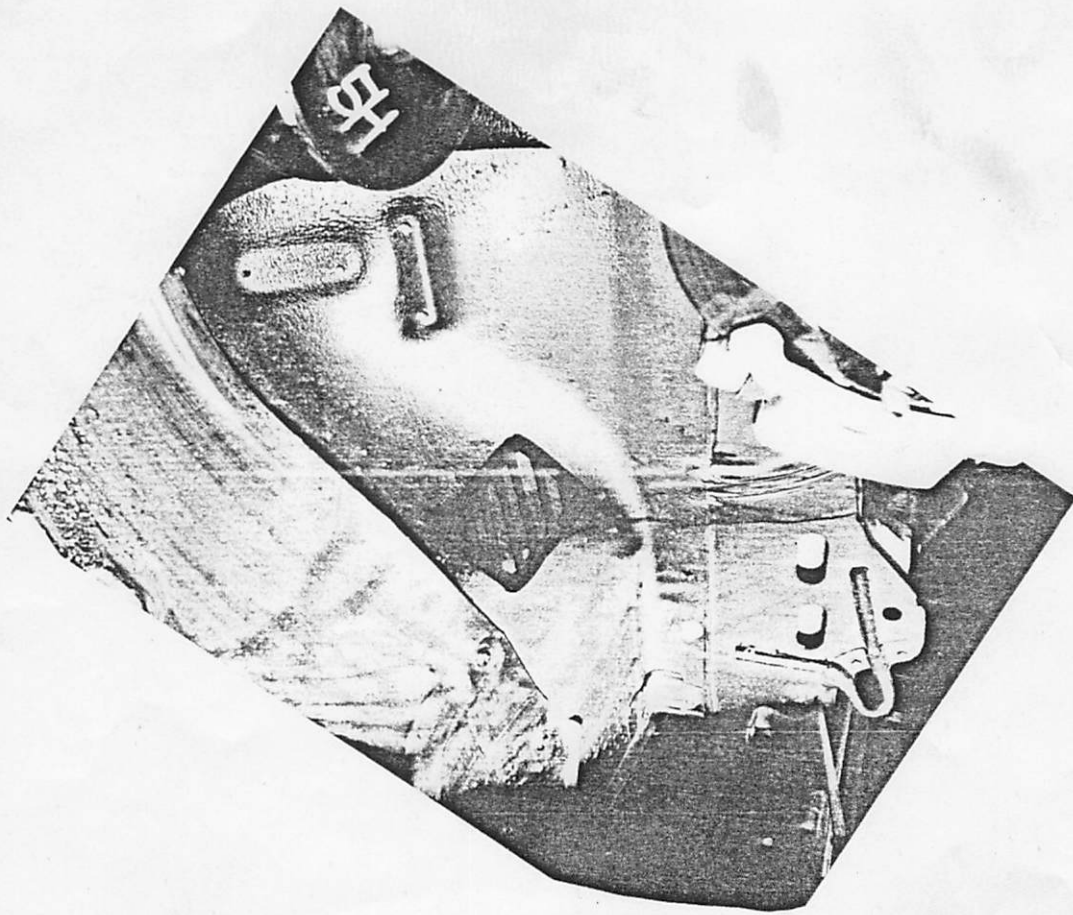


4. PLUMBING OF INTERCOOLER PIPES

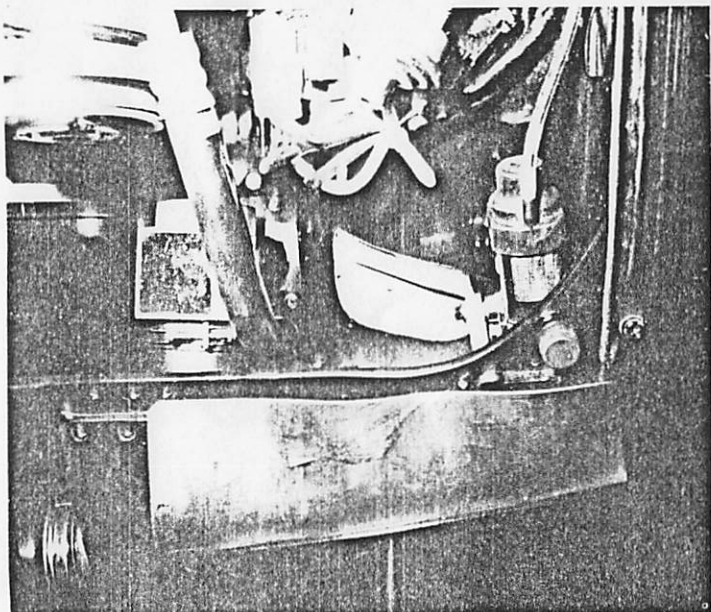
- a. Jack up the front part and remove front-left wheel. Drill hole in the tire house for piping. Refer the picture on the next page.



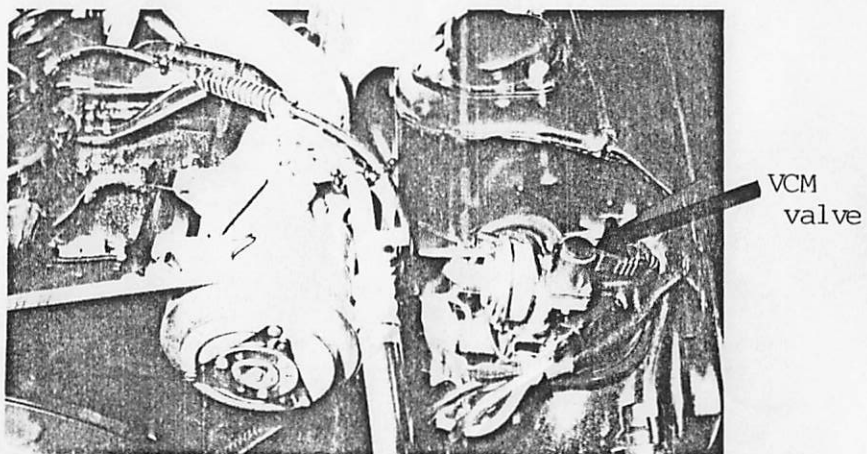
Drill a hole referring the picture.



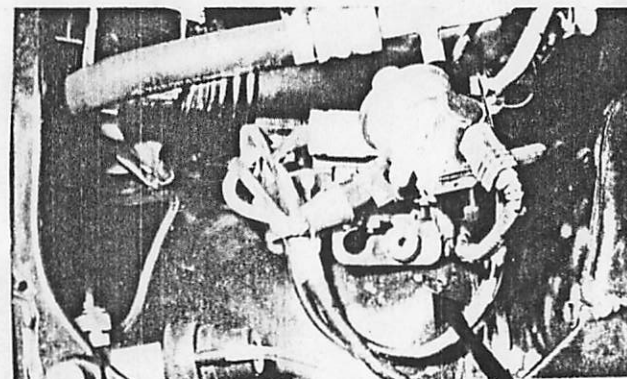
Engine compartment



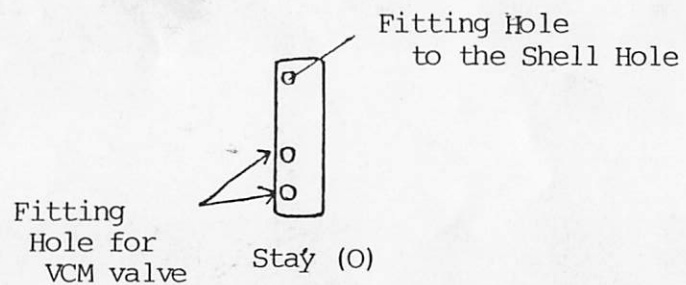
Transfer of VCM valve



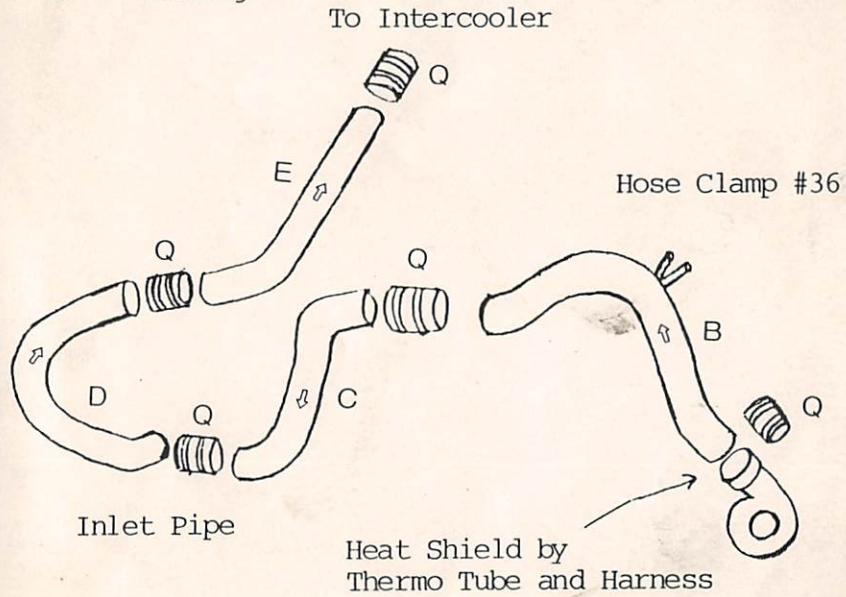
Remove VCM valve and transfer it using provided stay (O), tapping screw, and bolt M6.



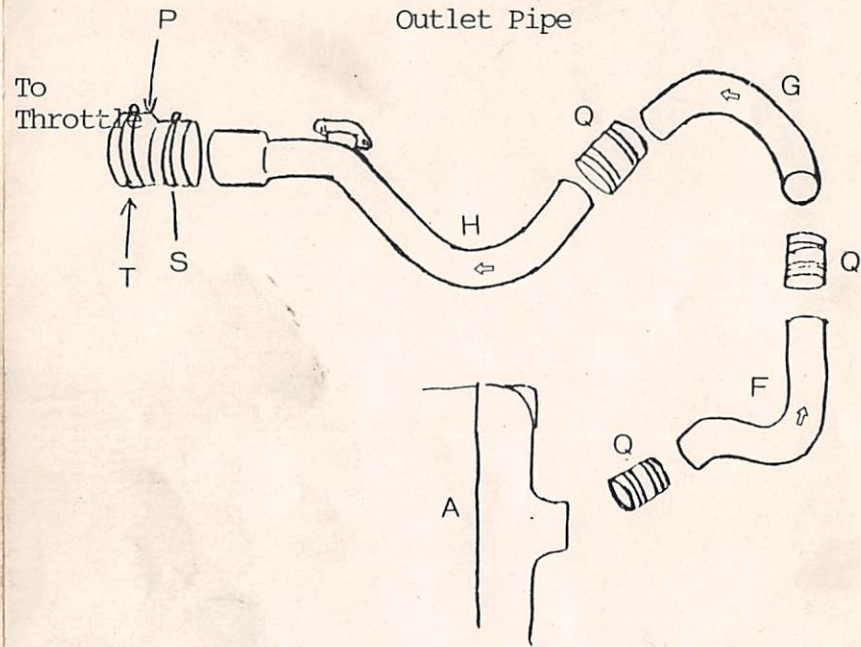
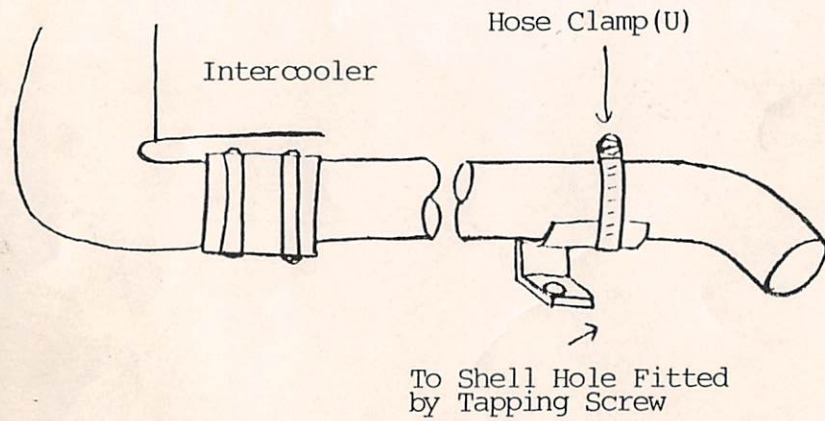
Original Hole on Body Shell



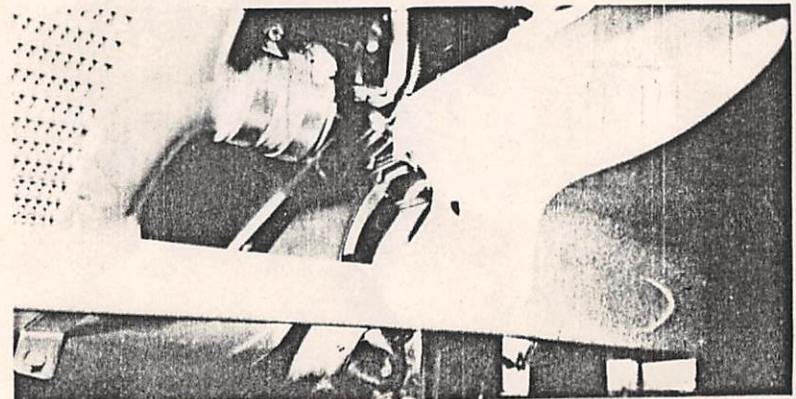
b. Plumbing



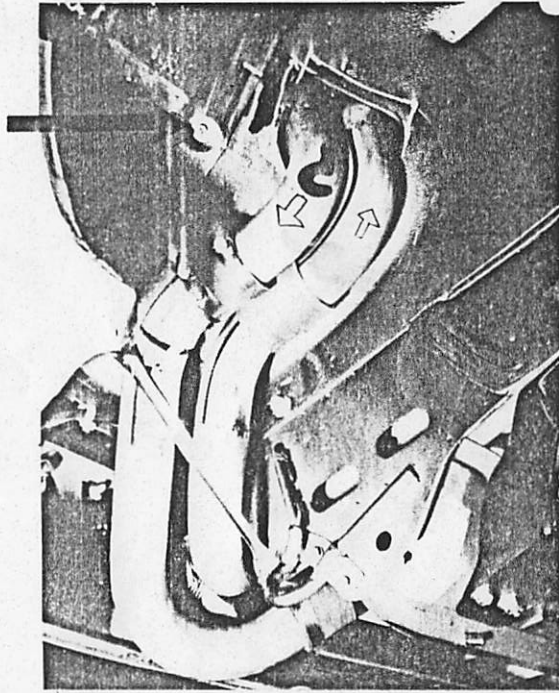
**Pipe(E) should be fitted on the body shell by the pipe stay.



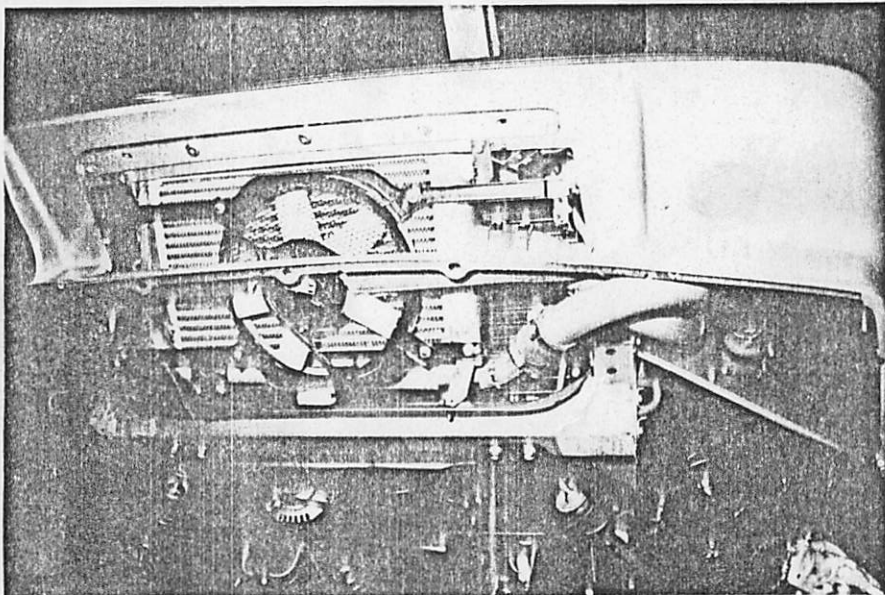
When plumbing pipe(F), cut off bumper rubber to allow piping. (See picture below)



Fix the clamp removed in Procedure 1-d to this bolt and hang the pipe (C) by tie-wrap.

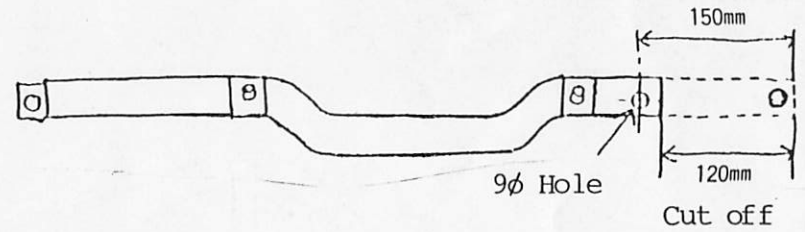


Refer picture

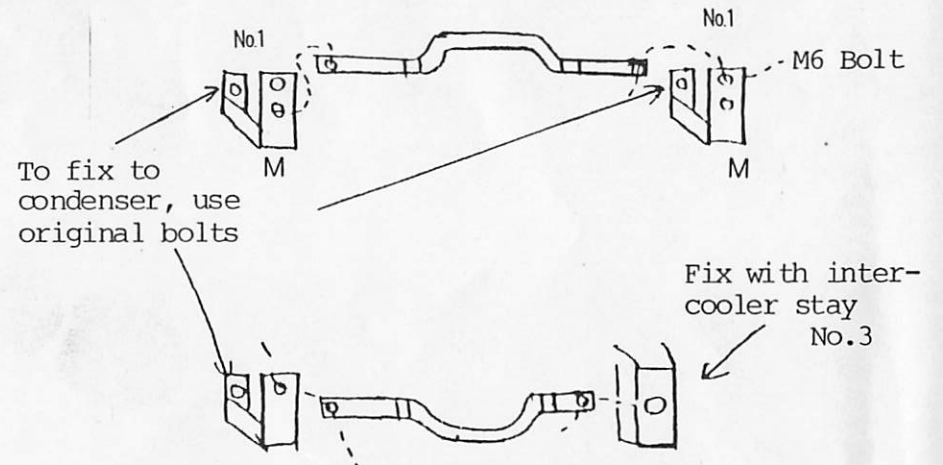


5. INSTALLATION OF ELECTRIC FAN OF AIR/CON

a. Modify the stay.



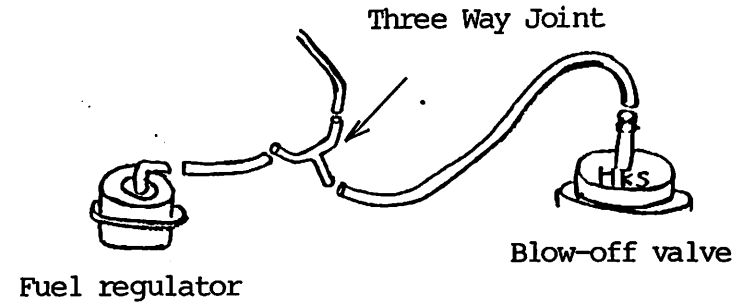
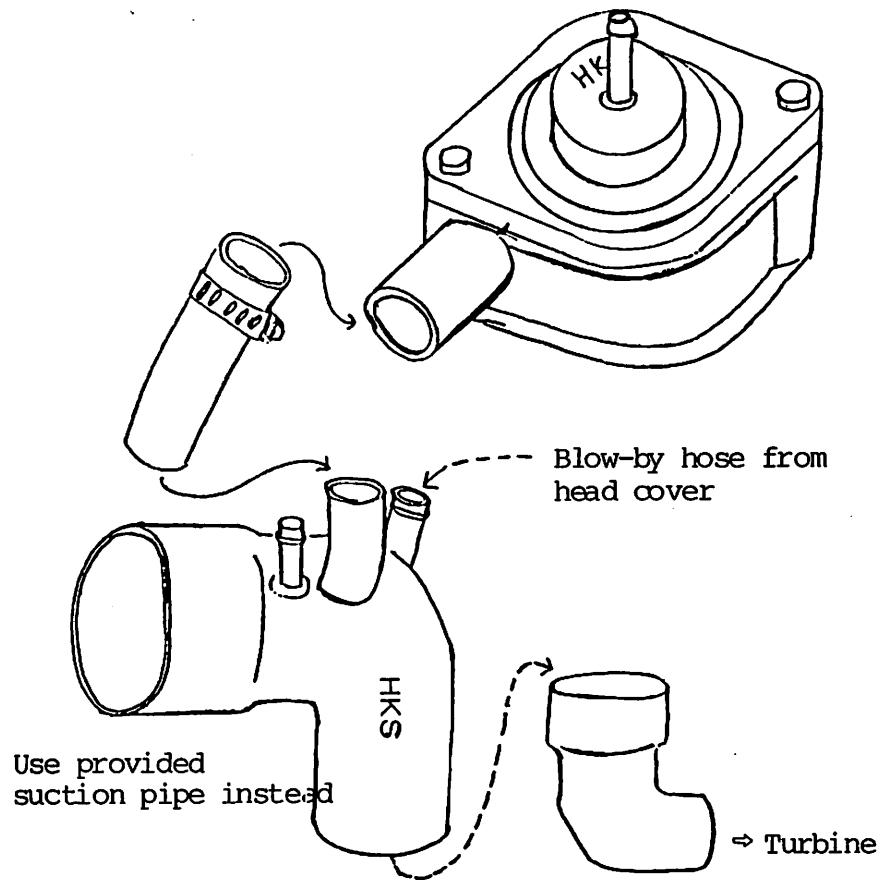
Using fan stay No.1 x 2 pcs. and No.2, fix the stay and fan.



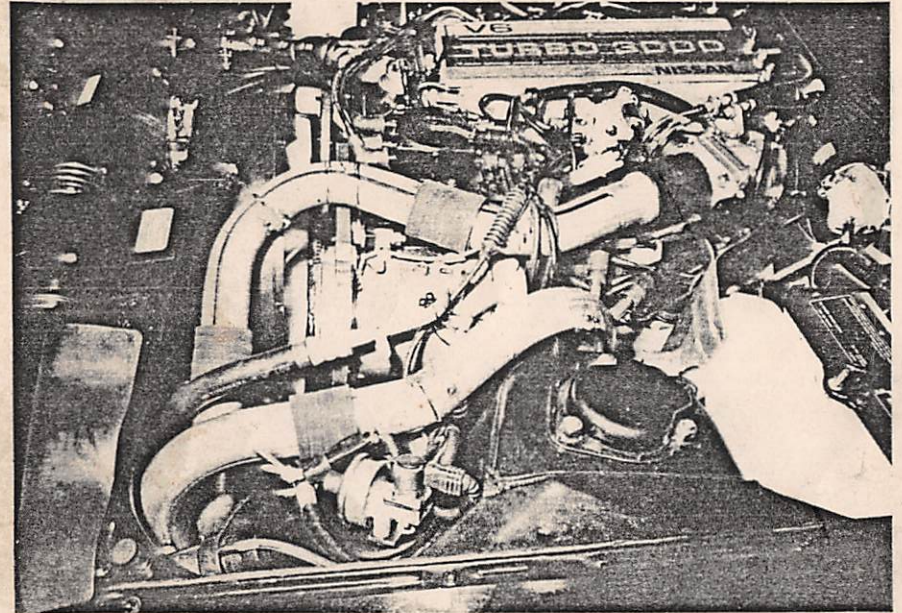
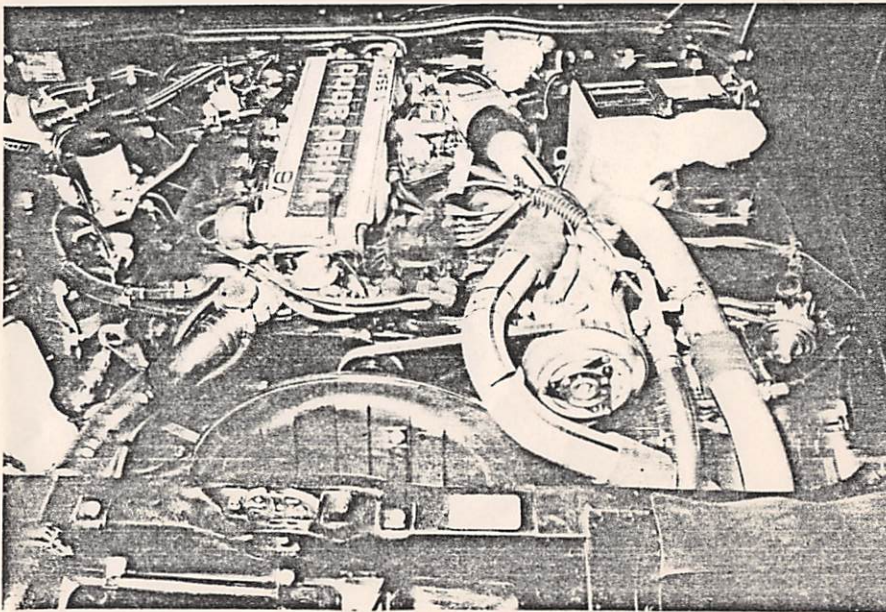
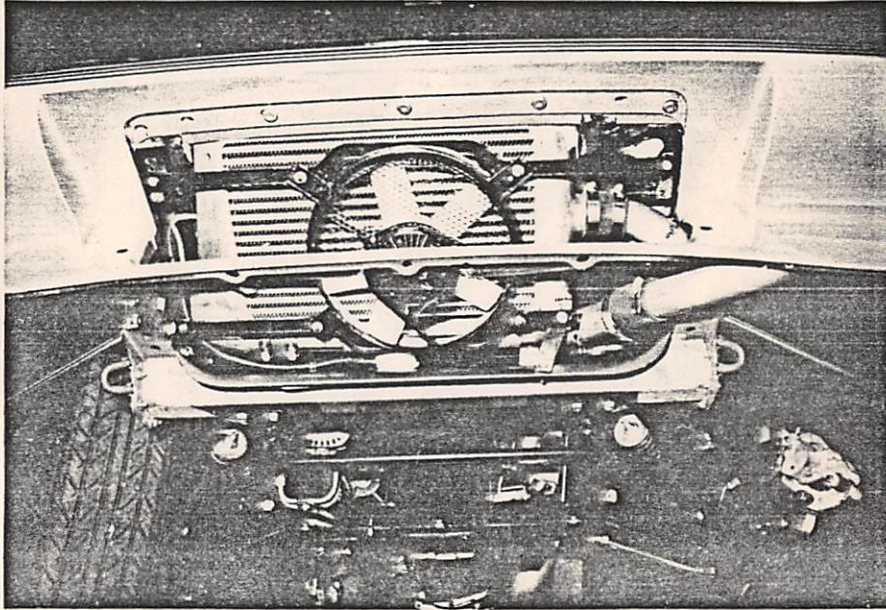
- ** Shave off bumper rubber where the electric fan touches.
- ** Cut off a part of the front grill where the fan touches.

6. INSTALLATION OF BLOW-OFF VALVE

Connect 22φ hose with the blow-off valve fitted on the intercooler pipe No.7 and make connection with provided suction pipe 22φ.



** Blow-off valve functions to improve throttle response at acceleration and deceleration and minimize load to the turbocharger and turbo lag.



Wrap rubber cushion around the intercooler pipe(H) to prevent the pipe from touching to the engine.

7. ADJUSTMENT

Installation of the intercooler can advance the ignition timing from 20° (BTDC) to 25° and increase the boost pressure up to 8.5 PSI (0.6kg/cm²) at maximum.