



RAPIDO "SVO PLUS" UPGRADE KIT

NOTE: THESE PARTS ARE NOT
LEGAL FOR USE IN CALIFORNIA
ON POLLUTION CONTROLLED MOTOR
VEHICLES.

PART # 07-0109A (85-86.5)

PART # 07-0109 (86.5 & Later)

RAPIDO GROUP
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Congratulations on your purchase of the **RAPIDO "SVO PLUS" UPGRADE KIT**. You are in for many miles of HIGH PERFORMANCE motoring. Quality XR4Ti products are our specialty, hundreds of hours of development and more than a years time has gone into this kit. Please read the instructions carefully and completely **before** beginning. They may seem overwhelming at first, don't be intimidated, they are just very detailed to ensure ease of installation.

All parts are included and all procedures have been carefully worked out and documented.

NOTE: This kit must be used inconjunction with RAPIDO INTERCOOLER SYSTEM PART # 07-0102 to avoid severe engine damage.



**BUCKLE UP
YOU'RE GONNA NEED IT !**

RAPIDO "SVO PLUS" ENGINE UP-GRADE SYSTEM FOR XR4Ti

INSTALLATION INSTRUCTIONS

UNDERHOOD

1. Remove air cleaner lid and filter element.
2. Remove 2 phillips head screws inside air cleaner base.
3. Un-plug evaporator cannister paper tube from air cleaner canister.
4. Remove 2 10mm nuts near top of lower coolant overflow bottle (immediately under air meter assy.) Save these for future use.
5. Loosen hose clamps on hose going from air meter to turbo inlet. Remove hose from vehicle.
6. Remove coolant bottle plastic clip from air meter bracket.
7. Unplug 4 wire connector from front side of vane air meter (pull straight out). It may help to loosen the meter inside of the bracket, before attempting to unplug the air vane meter electrical connector.
8. Remove air cleaner/air meter assy. from vehicle. (note: this can be accomplished without removal of any other screws) Remove the upper sheet metal screw, metal insert and rubber bushing used to mount the assembly.
9. Unbolt air meter from mounting bracket.
10. Loosen hose clamp to release air cleaner bottom hose from air meter.
11. Remove 4 phillips screws attaching inlet flange to NEW air meter. Being careful not to damage gasket remove inlet flange.

12. With fingers reaching inside flange snout, stretch the hose (removed in step 10) onto the flange snout, being sure to orient it properly before you proceed. DO NOT slide the hose up flush with the flange just yet and DO NOT use any lubricants, other than saliva, to facilitate this step!!
13. Holding flange plate horizontal, drop the 4 phillips head screws into their counter sunk holes. NOW finish pushing the hose up tight against the flange and tighten the hose clamp.
14. Install hose and flange assy. to the vane air meter.
15. Install 2 rubber isolaters to vane air meter (see Attachment I, picture 1, # 15).
16. Install air meter-to-turbo hose, onto air meter assy. and tighten hose clamp.
17. Install new air meter mounting bracket to air meter (see picture 1, # 17). Use 10mm nuts removed in step # 4. Attach air cleaner bottom hose to air cleaner hose with hose clamp.
18. Glue rubber pad to inner fender (see picture # 2).
19. Install rubber bushing and metal insert (see pict. # 3) into new air meter mounting bracket.
20. Use one of the sheet metal screws that attached the original air meter assy. to fasten the new air meter to the inner fender (See Attach. 1 Photo 3, # 19).
21. Slip hose over turbo inlet and secure with hose clamp.
22. Re-connect air meter electrical plug to new meter.
23. Re-connect vapor cannister hose to air cleaner.
24. Use one of 2 screws removed in step 2 to attach air cleaner securely to air meter mounting bracket.
25. Remove rubber hose from coolant recovery bottle and install end with tension clamp back onto coolant re-circulation tank. Route rubber hose downward between vapor cannister and power steering rack. Tie in place with plastic tie wrap. The coolant recovery bottle will not be re-used in the new SVO set-up.
26. Install new air cleaner element.

27. Install air cleaner lid and nozzle. (note: IT IS VERY IMPORTANT THAT THE NOZZLE BE PROPERLY INSTALLED AND ALLIGNED AND FITTED PROPERLY.
28. Install knock sensor in new location at rear of lower intake manifold (see Illus # 4).
29. Remove electrical plug from old knock sensor and plug onto new knock sensor.

EEC IV PROCESSOR

1. Remove production processor from underneath dash see attachment # 2 Illus # 5 & attachment for detailed instructions and sketch.
2. Locate wire # 30 yellow/lt green (see Attachment # III & Attachment IV, Sketch #1).
3. Very carefully strip 3/4" of insulation off wire # 30 approx. 4" from end of the large EEC IV connector plug (see Attachment IV).
- (*) 4. Using 6" length of jumper wire supplied carefully solder jumper between bare ground wire and wire # 30, at the stripped section that you prepared in step 3. (see Attachment # 4 for sketch).
5. Wrap solder joints with electrical tape and re-install NEW RAPIDO SVO PLUS EEC IV processor.
6. Re-install entire assy. beneath dash using reverse procedure (Illustration 5A).

(*) If no ground cable is found - extend wire & ground to any good ground source (Cowlng, etc.)

TIMING

1. Disconnect "spout" line--this is the large black weather proof connector on the single yellow wire coming off the distributor (located just below the lower intake manifold).
2. Set initial timing to 10 deg BTDC. (Do not cheat here the computer is much "smarter" than you think & it will only cause problems and deprecated performance.
3. Re-connect the "spout" line connector.

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**** YOU ARE NOW FINISHED--BUT A FEW HINTS BEFORE YOU GO OUT
PORCHE HUNTING ****

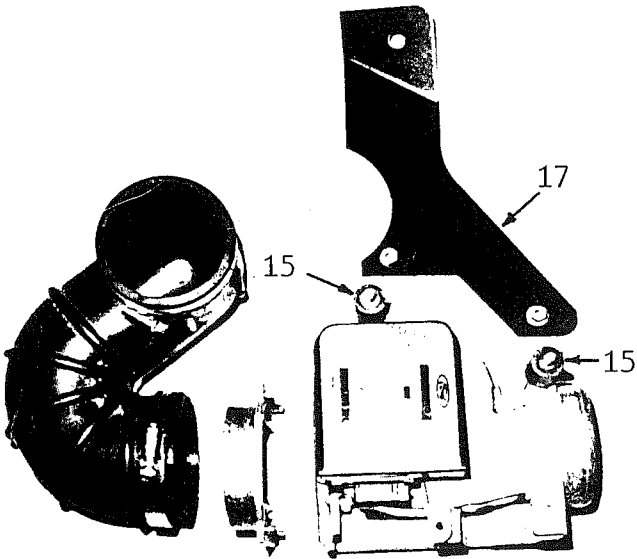
- A. Use only Premium unleaded fuel-the higher the octane rating the better.
- B. This system upgrade **MUST** be used with an intercooler.
- C. In the event that service is required some time in the future, save all documentation for your servicing dealer-they will then understand this upgrade and be able to perform the required service.
- D. **AVOID** Full Throttle shifting - use a closed throttle shifting method, it will definately increase the life of your transmission. If you desire a heavy duty transmission that can withstand full-throttle shifting and other abuse, contact RAPIDO GROUP as we offer an outstanding transmission upgrade.
- E. Drivetrain failures directly attributable to the increased power output of this package will most likely NOT be covered by the Ford Factory Warranty.

DRIVE CAREFULLY !!!

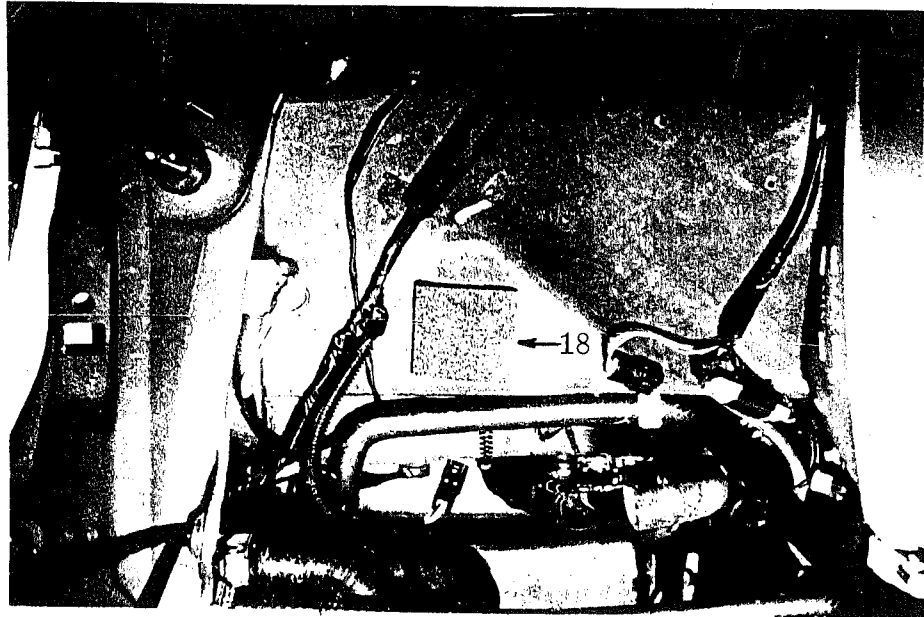
Thank You for your business,
RAPIDO GROUP

ATTACHMENT I

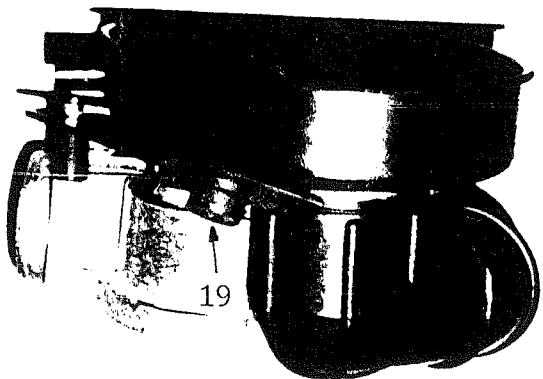
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PICTURE # 1

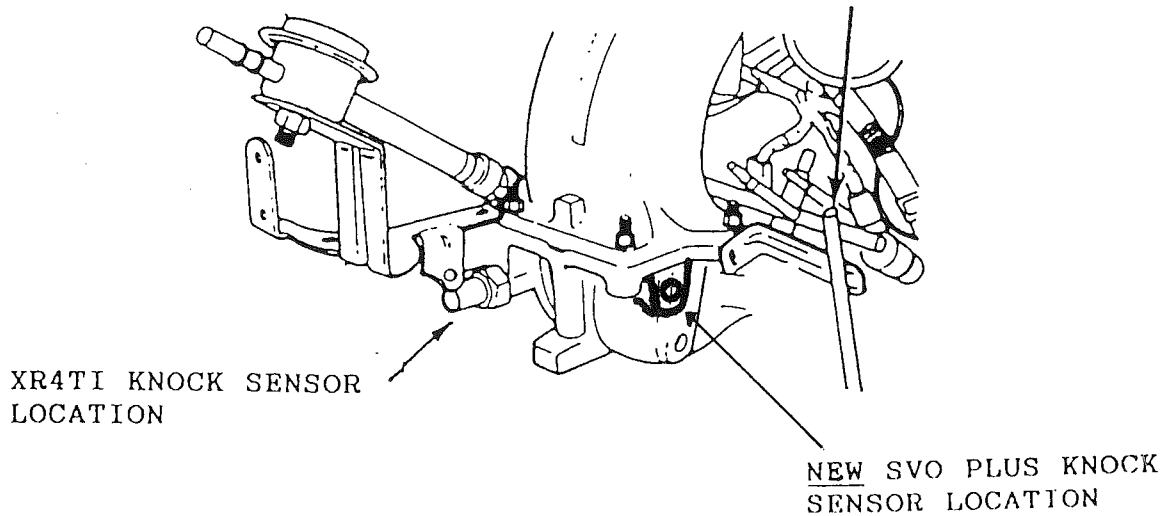


PICTURE # 2



PICTURE # 3

ATTACHMENT II

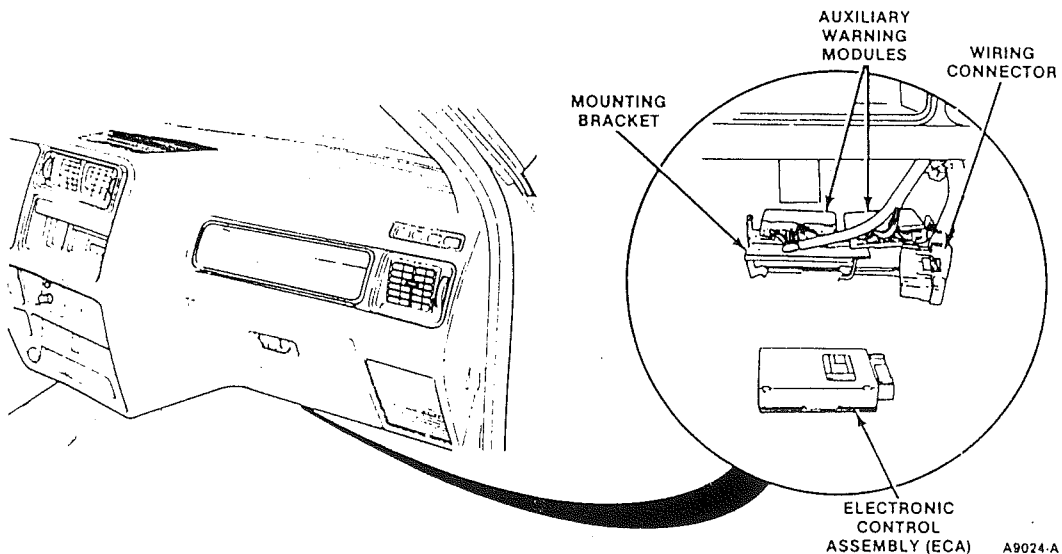


ILLUS # 4

PASSENGER COMPARTMENT

The Electronic Control Assembly (ECA) is located behind the lower instrument panel on the passenger side of the vehicle. Access is gained to the ECA wiring connector by removing a sound-dead-

ening panel attached to the bottom of the instrument panel. A screw through the center of the wiring connector attaches the wiring harness to the ECA. The screw can be loosened and the connector separated without removing the ECA from its mounting bracket.



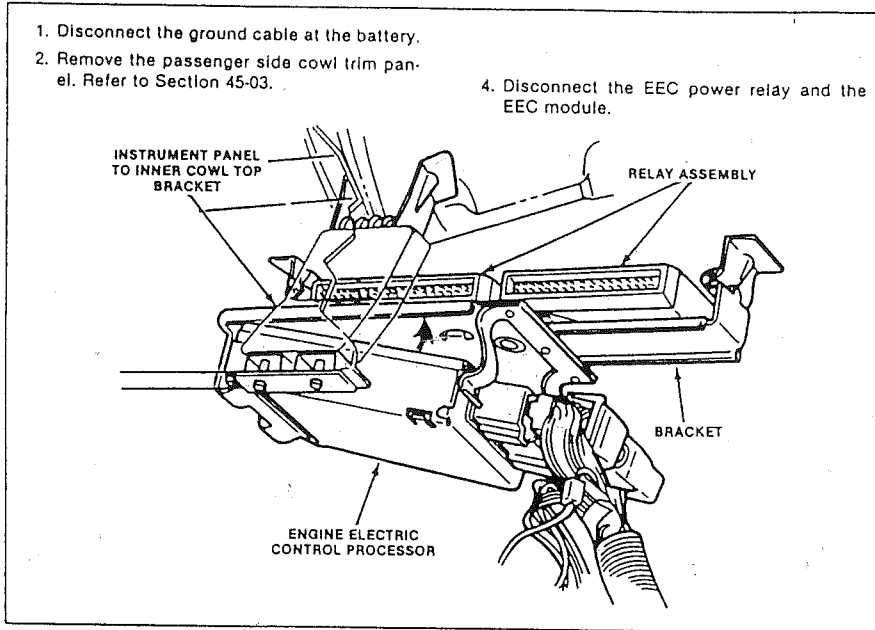
ILLUS # 5

ATTACHMENT III

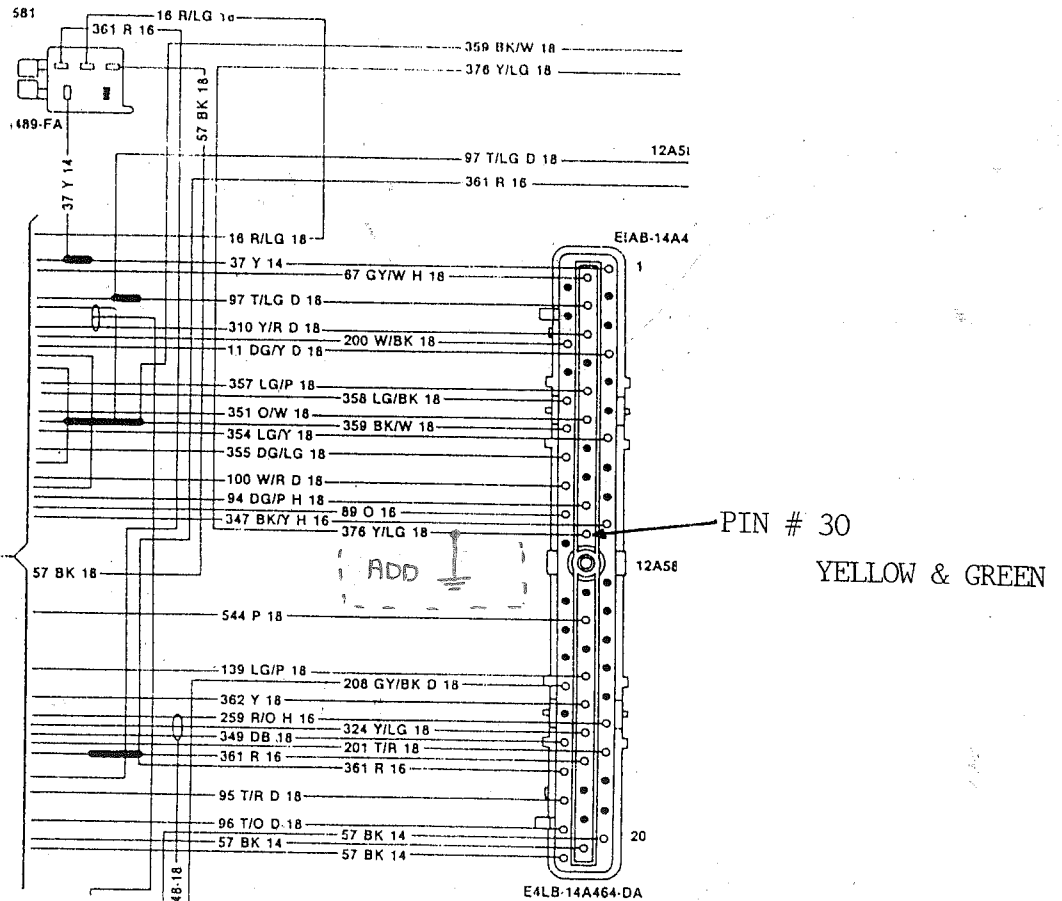
56.

REMOVAL AND INSTALLATION

1. Disconnect the ground cable at the battery.
2. Remove the passenger side cowl trim panel. Refer to Section 45-03.
4. Disconnect the EEC power relay and the EEC module.



ILLUS # 5A

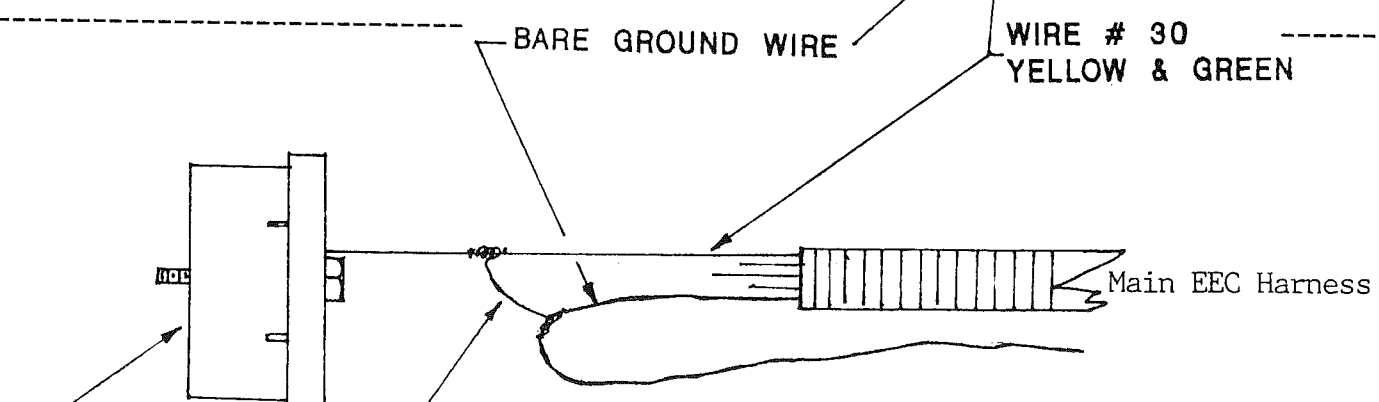
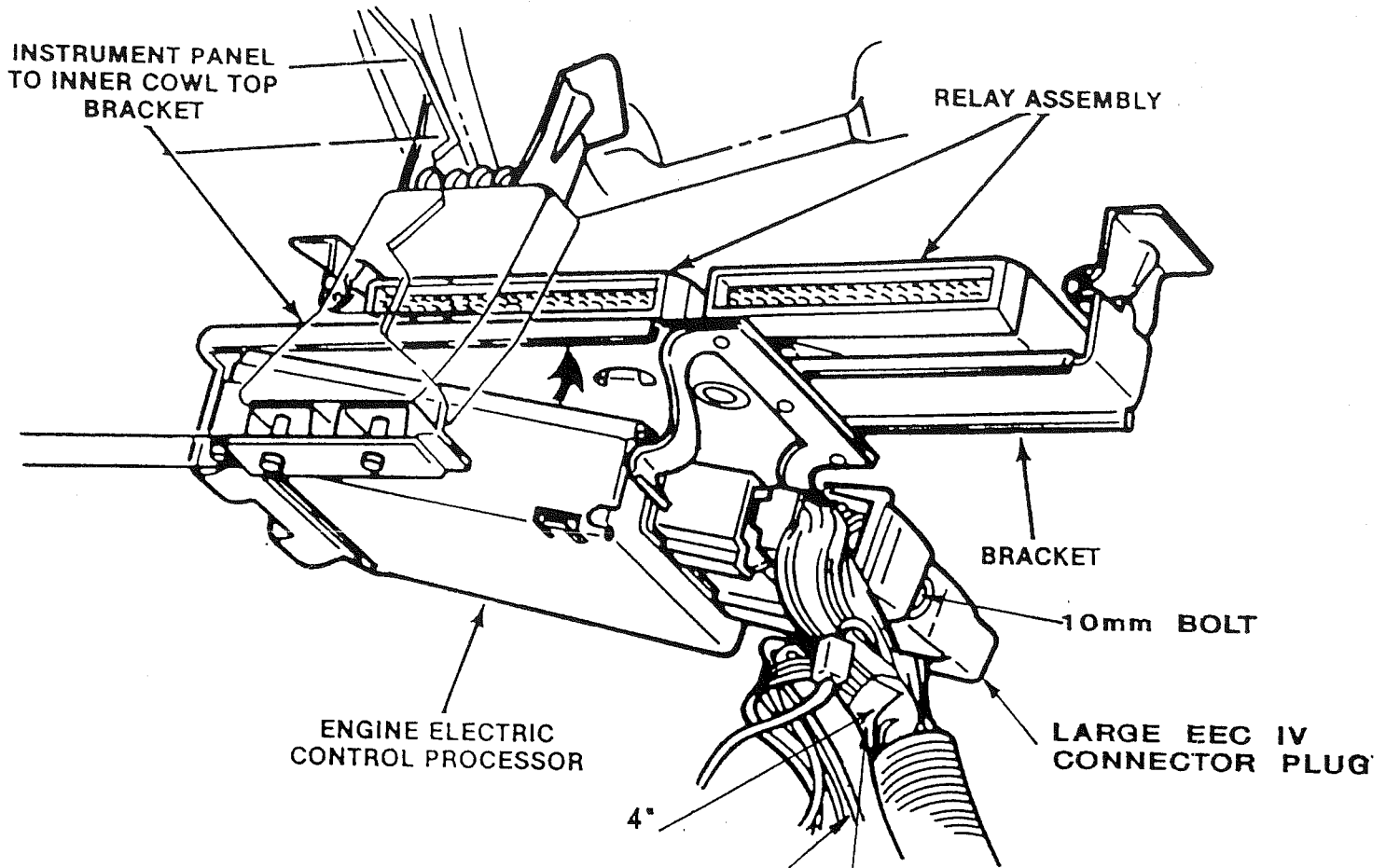


ILLUS # 6

END VIEW EEC IV
CONNECTOR

ATTACHMENT IV

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Solder jumper wire between # 30 wire and bare ground wire
Note: on 88 & 89 model XR4Ti's - solder to #30 & ground to any good mechanical ground (sheet metal in cowl, etc.)

SKETCH