Installation Instructions for the F2B Pedal Bracket Kit

A. General Information

1. Before you begin, familiarize yourself with this installation procedure. It is assumed that the installer is an experienced automotive technician and the procedure is written accordingly. If you feel uncomfortable performing these modifications, you should seek professional help.

2. The modifications and procedures outlined here are only guidelines for performing the work and all applicable shop safety equipment (safety glasses, etc.) and practices (disconnect battery before beginning work, car properly supported on jackstands or vehicle lift, etc.) should be followed.

3. Have available, and refer often to, the applicable Factory Service Manual for your vehicle for procedures not specific to the pedal brackets.

4. There will be some cutting and drilling necessary to complete the installation. Some tools that will make the work go easier:

    A. Purchase a new, good quality, half-round double-cut file for use on the floorpan - it will make quick work of the trimming process.

    B. It will be necessary to drill holes in the thin sheetmetal of the floorpan and cowl. A 3/16” - 7/8” stepped drill (Irwin No. 4 Unibit or equivalent) works very well for this.

    C. Check your 15mm deep socket selection to ensure one is available that will fit into the master bracket holes. Clearance was verified with several different brand name sockets, but on occasion it will be necessary to obtain a socket with a thinner wall than what is on hand.

    D. It will be necessary to trim several factory brackets and flanges as the installation progresses. Having access to a tabletop belt sander during the process will make for a neater finished edges and saves considerable time cleaning up rough cuts.

5. You will find it easier to work if you follow the process below to maximize the available working room and minimize the chance of damaging interior surfaces and underhood components. The installation may be completed with some items left in place, but experience has shown it is generally faster to get more things out of the way first.

B. Pedal Bracket Installation

1. Remove the driver's seat and console (if so equipped).

2. Remove the fuse box cover, lower dash access panel, instrument cluster surround and the main dash panel (Caprice/Impala) or the lower dash panel (Roadmaster).

3. Remove the under-column reinforcement plate and support bracket.

4. Remove the steering column toe plate bolts and upper nuts, and then lower the steering column enough to access the wiring. Unplug all electrical connections and disconnect the steering shaft.

TIP: Place an inverted milk crate or sturdy cardboard box under the steering wheel to temporarily support the column while unplugging the connectors.

5. Remove the steering column.

6. Unbolt and remove the cowl reinforcement plate located above the steering column.

7. Unplug the brake and cruise control switches located on the brake pedal assembly.

8. Remove the clip holding the brake booster actuator rod to the brake pedal and slide the rod off of the pedal, be careful not to lose any spacing washers as they may be needed later.

9. Using a 15mm deep socket, remove the 4 nuts holding the brake pedal bracket to the firewall of the car. Remove the upper bolt that fastens the factory pedal bracket to the underside of the cowl.

10. Pull the brake pedal bracket off of the firewall, it may resist moving if it is stuck to the insulation, but it will come free with patience.

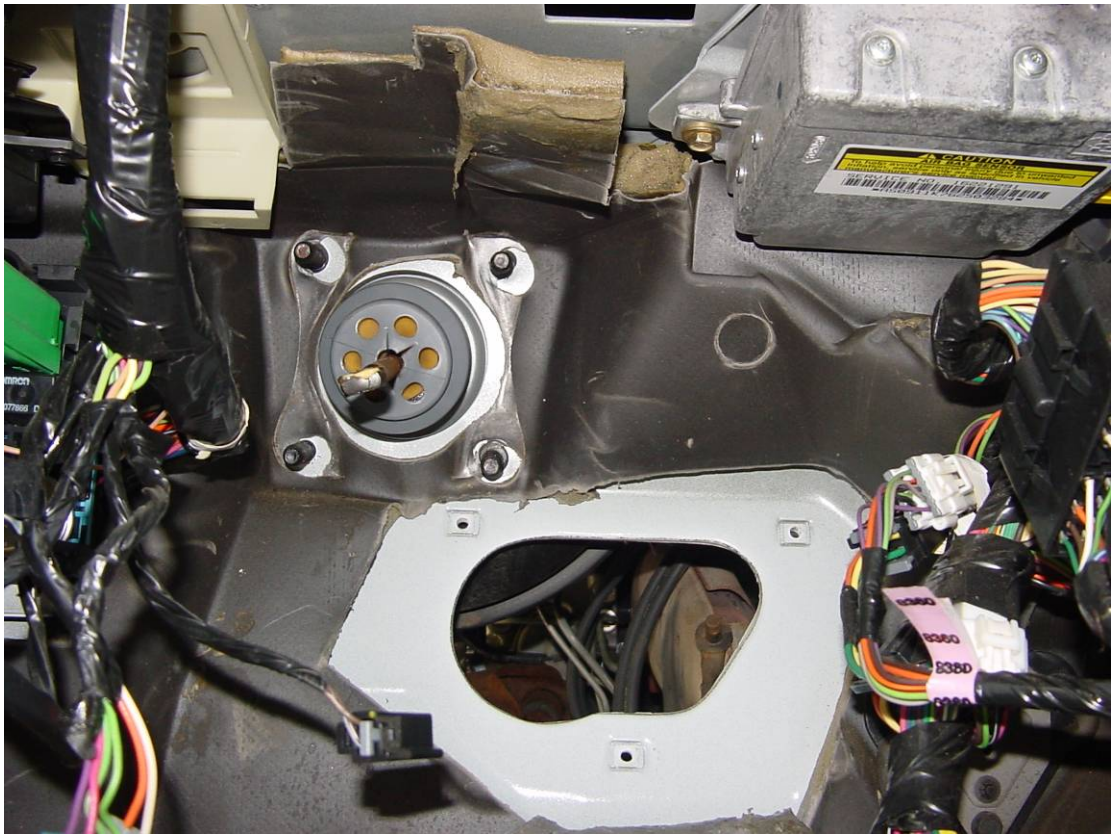

Figure 1 - Firewall with steering column and pedals removed

11. Using a 7mm deep socket, remove the 2 fasteners holding the under dash fuse panel (Convenience Center) to the firewall.

12. Tuck the fuse panel out of the way; it will be reattached later on.

13. For 1991 - 1994 model years, disconnect and remove the ABS brake controller. For all models, separate the VATS module from the tray and then remove the module mounting tray.

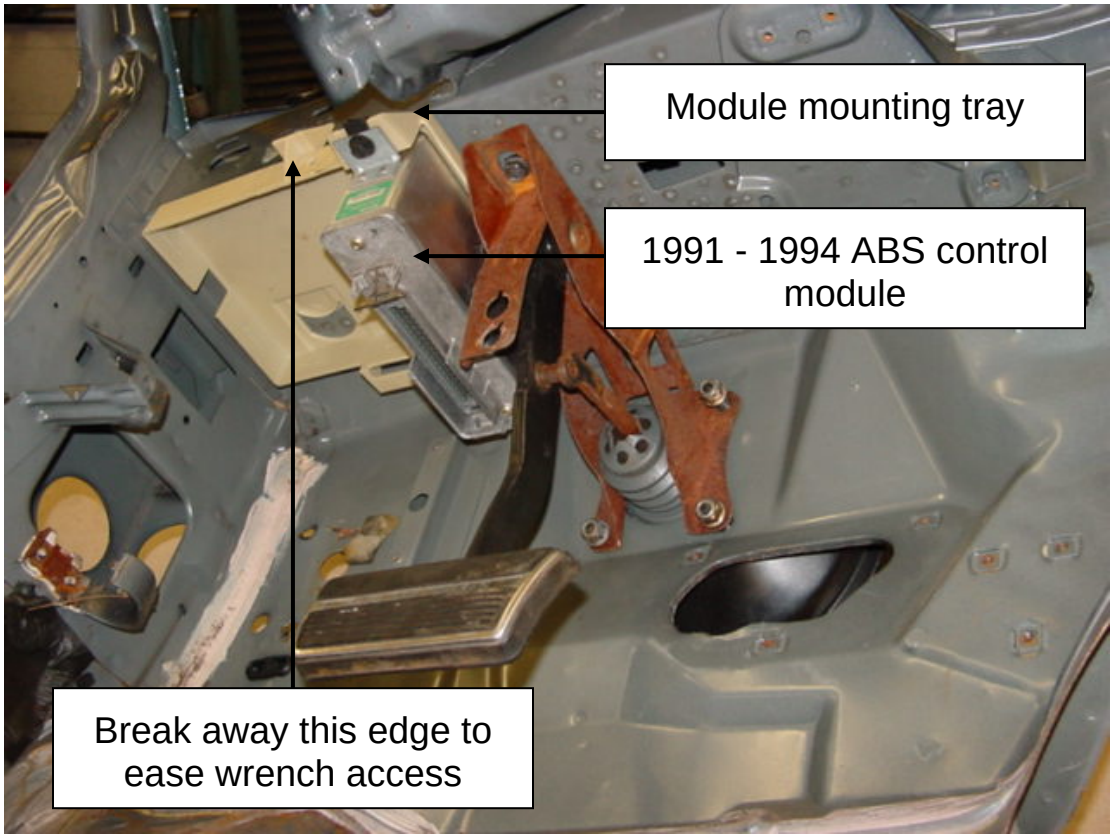

Figure 2 - Underside of cowl

TIP: To ease tray removal, use pliers to break away the shelf located below the rear retaining screw. This will greatly improve wrench access.

14. Slide the master bracket over the brake booster studs and mark the firewall insulation where it needs to be cut away.

15. Remove the bracket and cut the interfering insulation away.

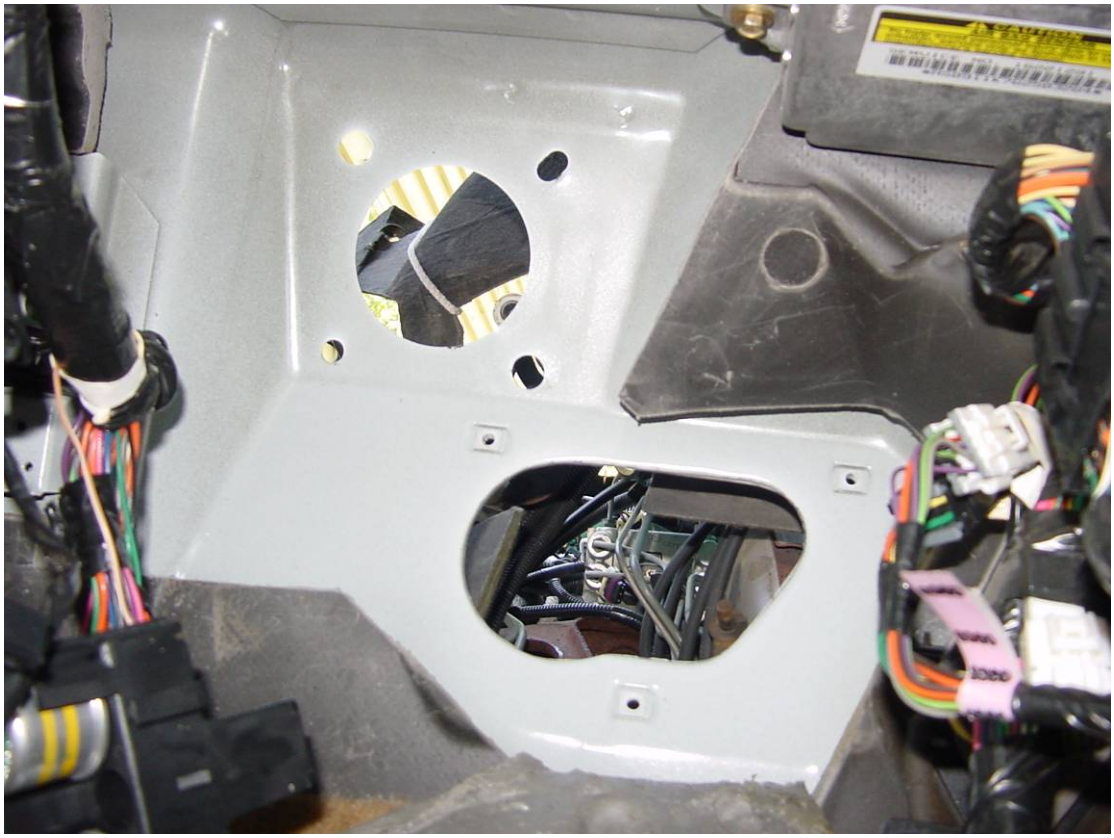

Figure 3 - Firewall with insulation removed

IMPORTANT: Do not omit the previous step, as the bracket will not fit properly if the firewall insulation is not removed.

16. Replace the master bracket and mark the floorpan for cutting. The bracket may now be removed and set aside.

17. Remove the left front tire. Disconnect and remove the air cleaner assembly and PCM. Remove the PCM mounting bracket and washer reservoir. Remove the bolts holding the cruise control module (if equipped) to the inner fender and unplug the electrical connector (it is not necessary to disconnect the throttle cable). The module may now be draped over the engine to keep it out of the way. Release all wire and hose retaining clips. Unbolt the inner fender and clear any remaining items. The wheel well may now be removed by pulling the rear edge down first and rotating it out through the fender opening. This step will make firewall access substantially easier.

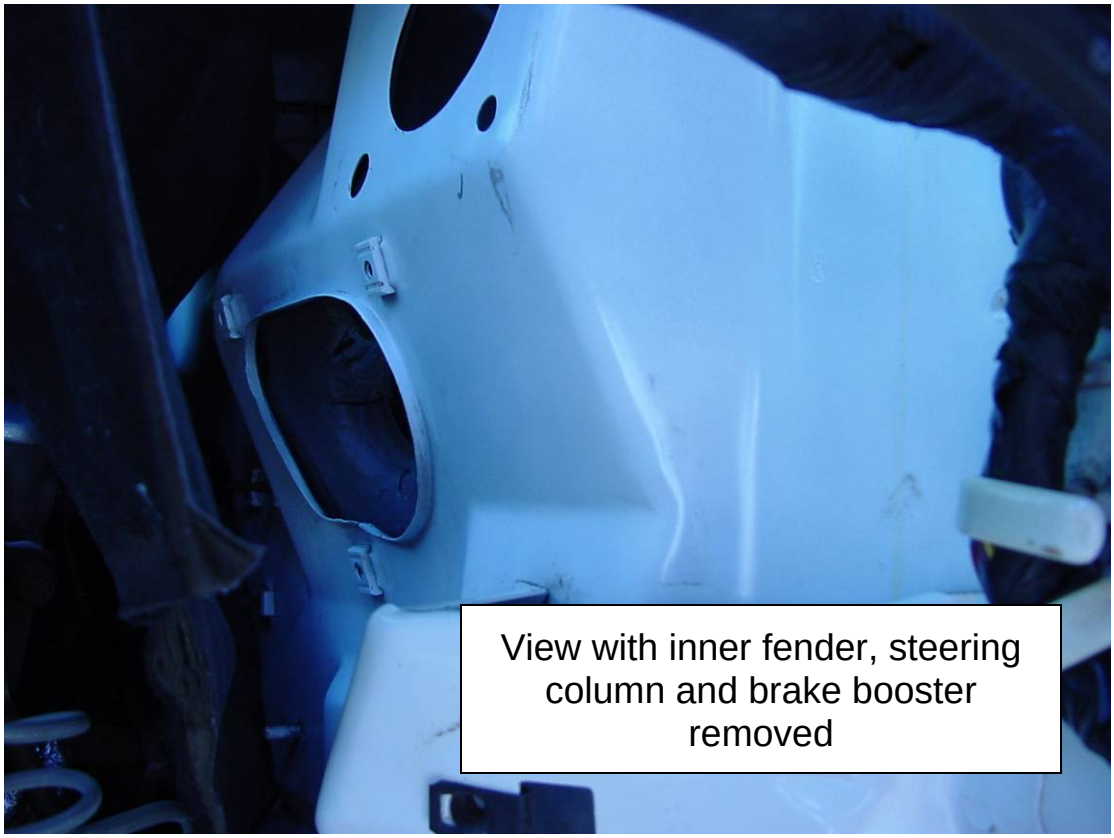

Figure 2 - Wheelwell view

18. Unbolt the master cylinder from the power brake booster and guide it off the booster studs. It is not necessary to disconnect the brake lines from the master cylinder.

19. Remove the brake booster. Be careful not to kink or pinch any brake lines when moving the master cylinder to clear the booster.

Figure 3 - Holding the engine bay insulation away from firewall

TIP: Clothesline or twine may be helpful to keep the master cylinder and engine bay insulation out of the way.

20. Very carefully cut the access hole though the firewall. Cut on the small side first, and test fit the master bracket often.

TIP: To avoid having to constantly remove and replace the booster while checking progress, insert some spare bolts into the master bracket to act as temporary studs. Tape works well to retain them in place. The temporary studs will make easier to ensure the bracket is properly aligned while checking progress.

21. Close in on the final shape using files. Try to achieve a 1/16” - 1/8” gap around the bracket. Being patient and spending the time necessary to get a nice fit will make for a more satisfactory installation.

22. Once trimming is complete, hold the master bracket in location by adding nuts to the bolts inserted earlier. Verify the clutch master cylinder assembly can be inserted into the bracket and is clear of the firewall. Ensure that the opening has been made large enough to install both

mounting bolts and permit wrench access. Make any adjustments as needed.

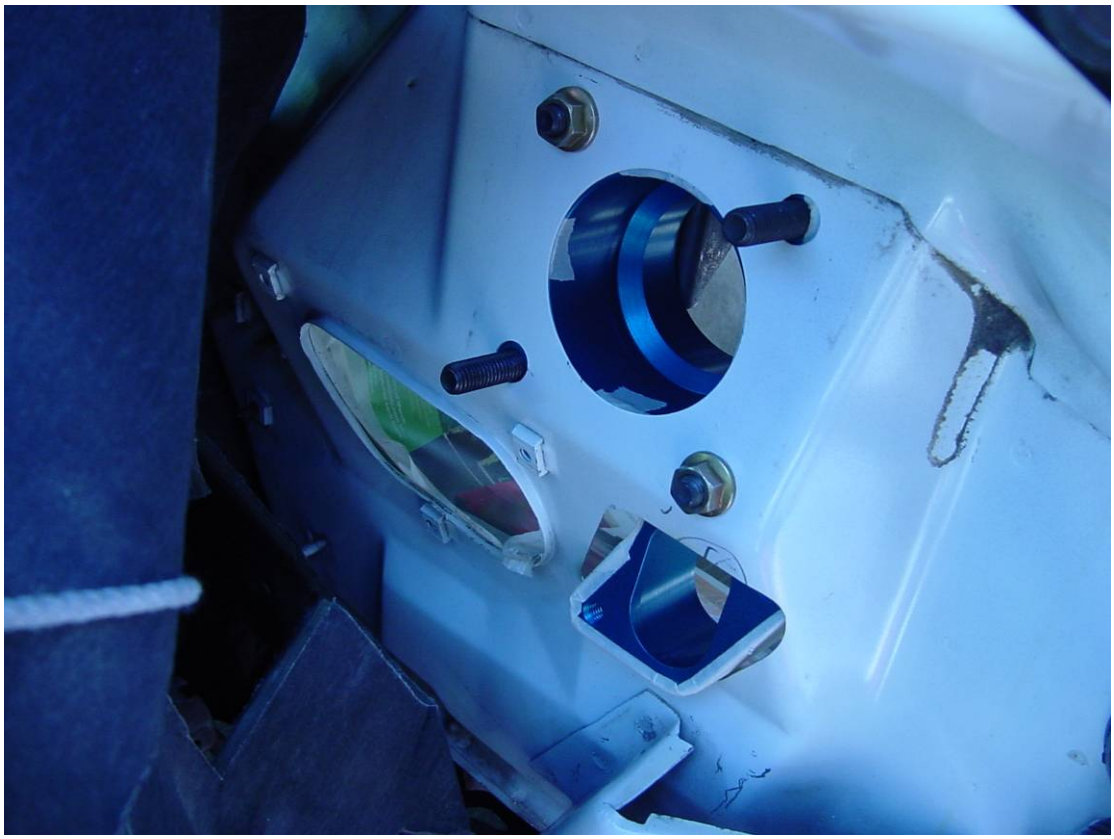

Figure 4 - Bracket in position and ready for clutch master cylinder check

23. Temporarily set the steering column into place and mark the toe plate where it protrudes into the hole. Remove the column and trim away the affected area.

24. Cut interfering engine bay insulation (if equipped) off of the firewall to match the hole. Note that some cars (police & taxi) are not fitted with engine bay insulation.

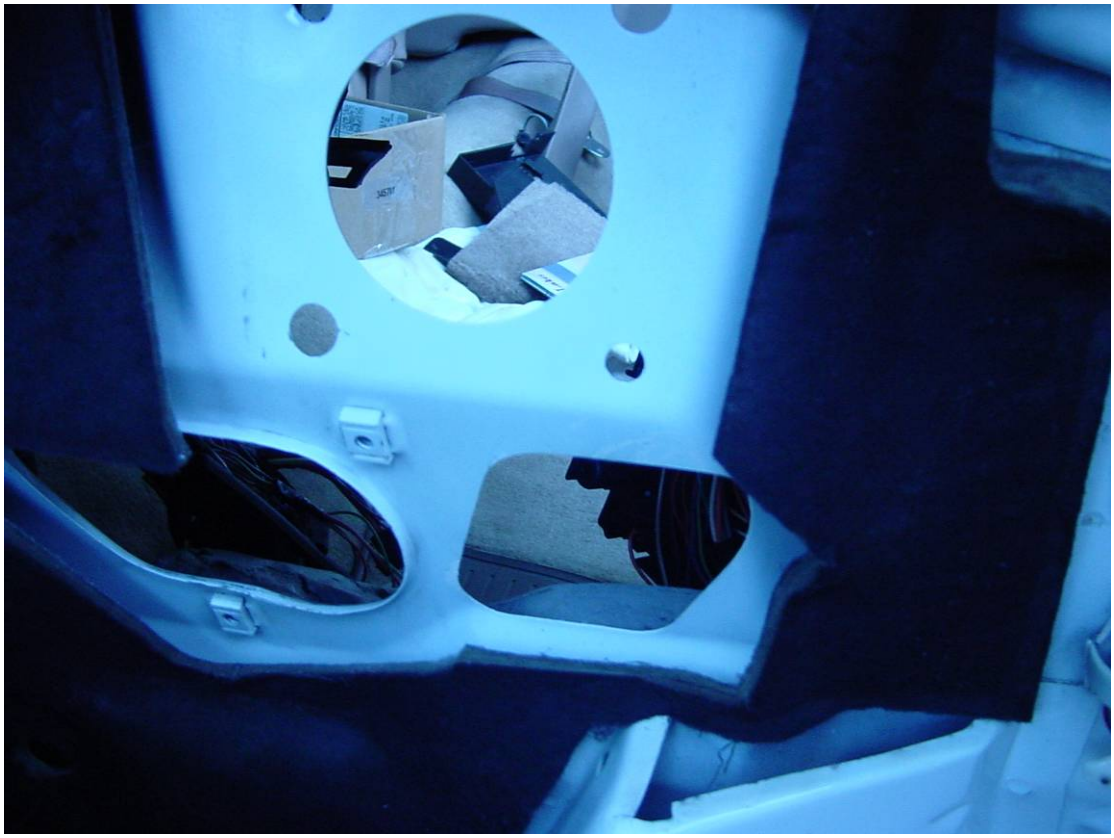

Figure 5 - Completed opening and trimmed engine bay insulation

25. Thoroughly clean all metal shavings and debris from the firewall area before proceeding.

26. You may wish to now paint the edges to prevent corrosion.

27. Modify the module mounting tray removed in Step 13 by following the instructions found in Appendix B - Module Mounting Tray Modification.

28. Reinstall the module mounting tray.

29. Slide the brake booster back into the firewall and reattach the master cylinder.

30. Seat the adapter bracket onto the booster and install the nuts removed in Step 13. Torque to factory specs.

31. If desired, the supplied foam may now be used to help seal the firewall penetration. Cut the foam to shape and press into place.

32. Prepare the F Body pedal assembly for installation by following the instructions found in Appendix A - F Body Pedal Assembly Modification.

33. Loosely bolt the overhead bracket to cowl, using the supplied 8mm flathead capscrew. The supplied screw will thread into the factory “J” nut.

34. Remove the “L” shaped bracket from the top of the F Body pedal assembly. Set the pedal assembly into place and fasten to the master bracket.

35. Align the overhead bracket to the pedal assembly and tighten the flathead capscrew.

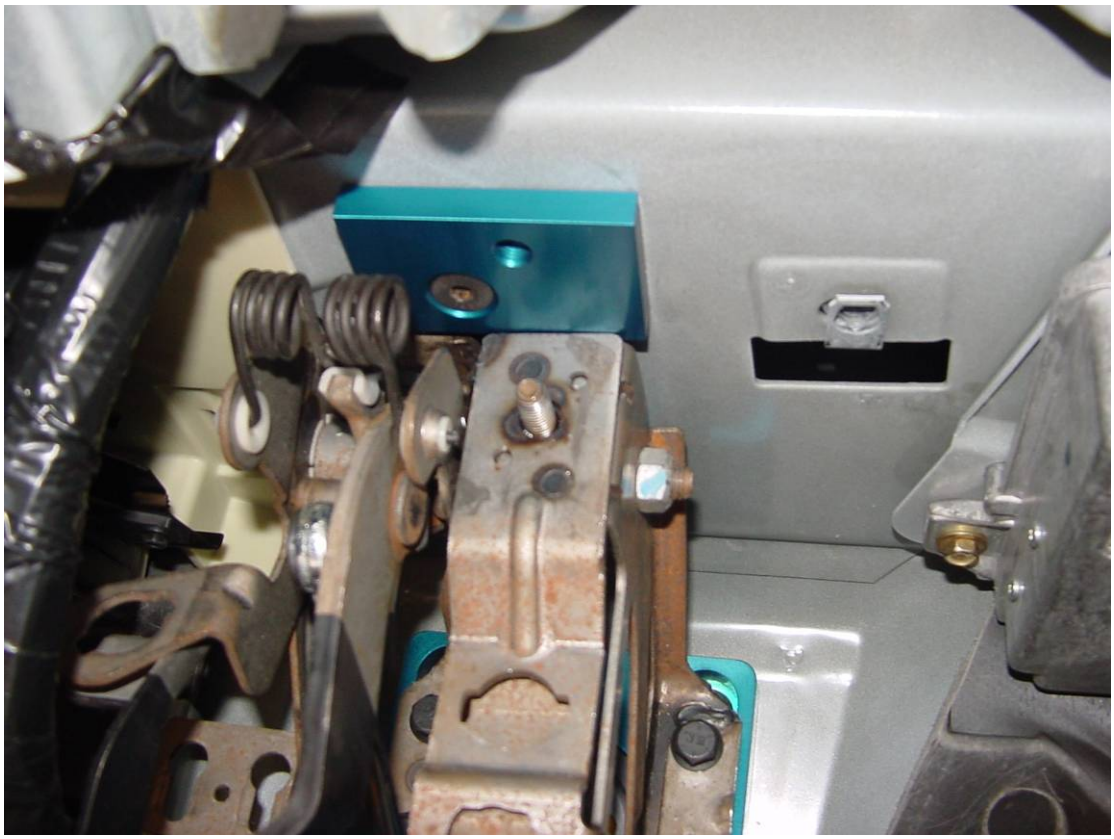

Figure 6 - Aligning the overhead bracket to the F-Body pedal assembly

36. Reinstall the “L” bracket removed in Step 34 and verify that the slotted hole aligns with the threaded hole in the overhead bracket.

NOTE: In some cases it may be necessary to slightly oversize the hole where the “J” nut is to allow for production variations. Remove the “J” nut and use a round file to make adjustments.

37. Using the threaded hole in the overhead bracket as a guide, mark the cowl clearance hole location.

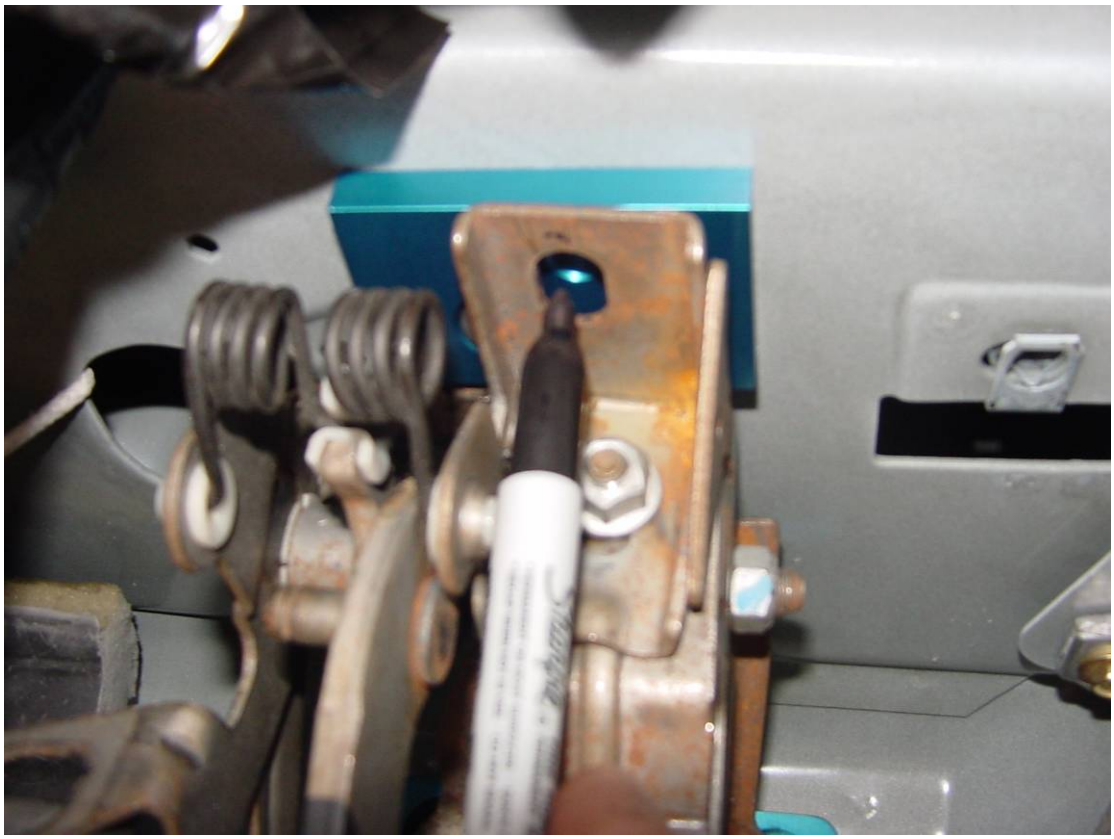

Figure 7 - Marking the cowl clearance hole location

38. Remove both the “L” and overhead brackets. Drill a ½” (minimum) diameter hole in the cowl.

IMPORTANT: This step provides necessary clearance for the overhead fastener and must not be skipped or the pedal assembly will not tighten properly.

Figure 8 - Completed cowl clearance hole

39. Thoroughly clean all metal shavings and debris from the cowl area before proceeding.

40. Reattach the overhead bracket to the cowl. Torque the supplied 8mm flathead capscrew to the factory spec for the original fastener.

41. Using the supplied flange headed hardware, bolt the F Body pedals to the master bracket. Torque the 5/16” diameter bolts to 20 ft-lbs. Torque the 3/8” bolts to 30 ft-lbs. Refer to the attached photo for reference.

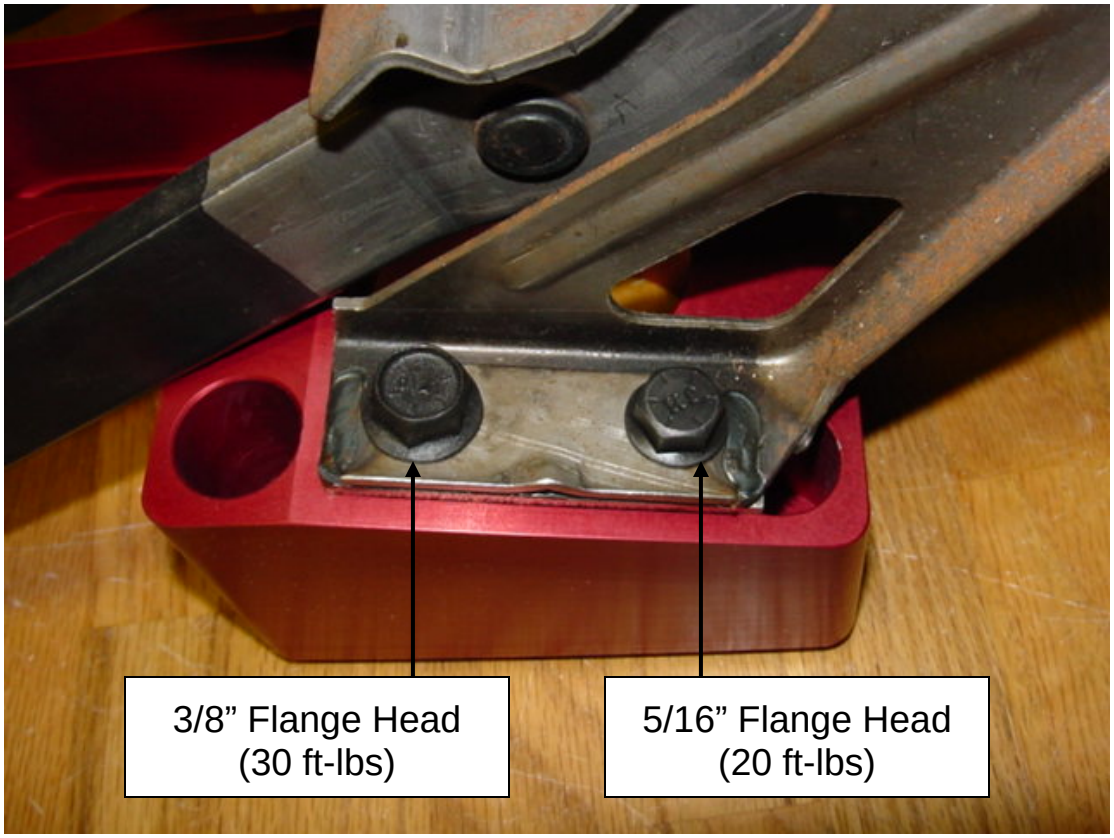

Figure 9 - Bolt Locations

42. Using the supplied 3/8”-24 socket head capscrew, attach the F Body pedal to the overhead bracket and torque to 20 ft-lbs.

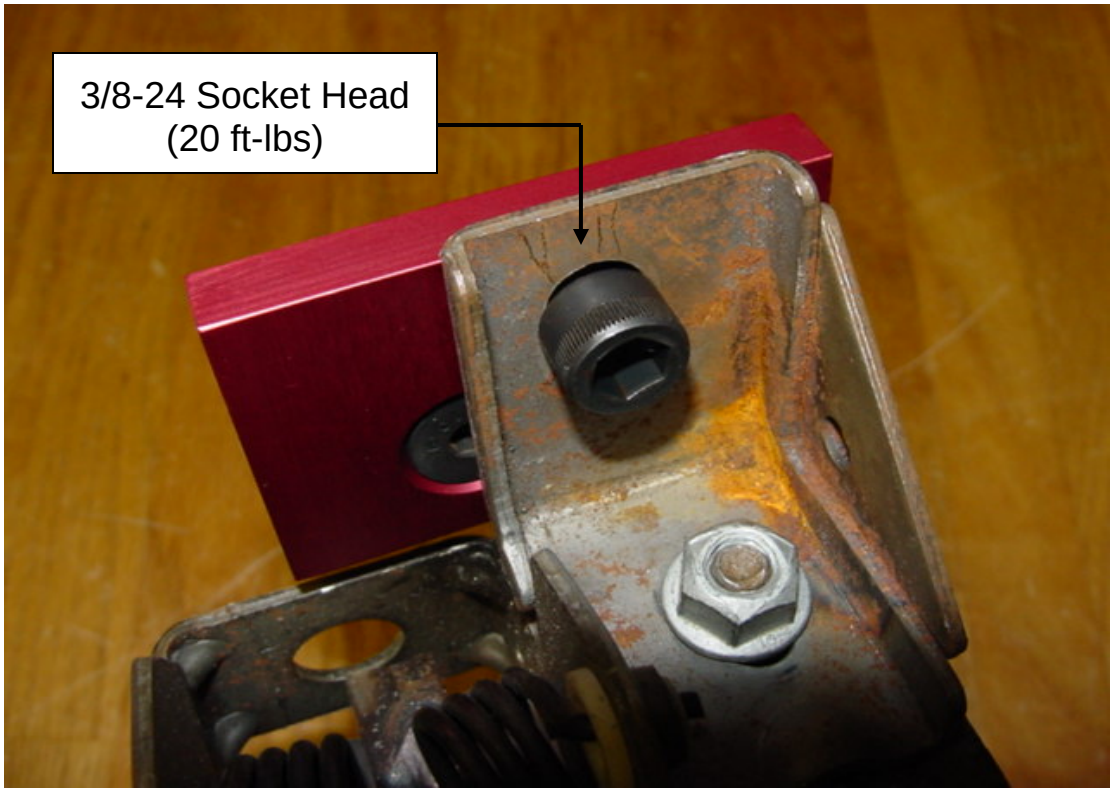

Figure 10 - Close up of overhead bracket in final configuration

43. Ensure that the nut that retains the “L” bracket to the pedal assembly is properly tightened. When completed the assembly should look like the attached photo.

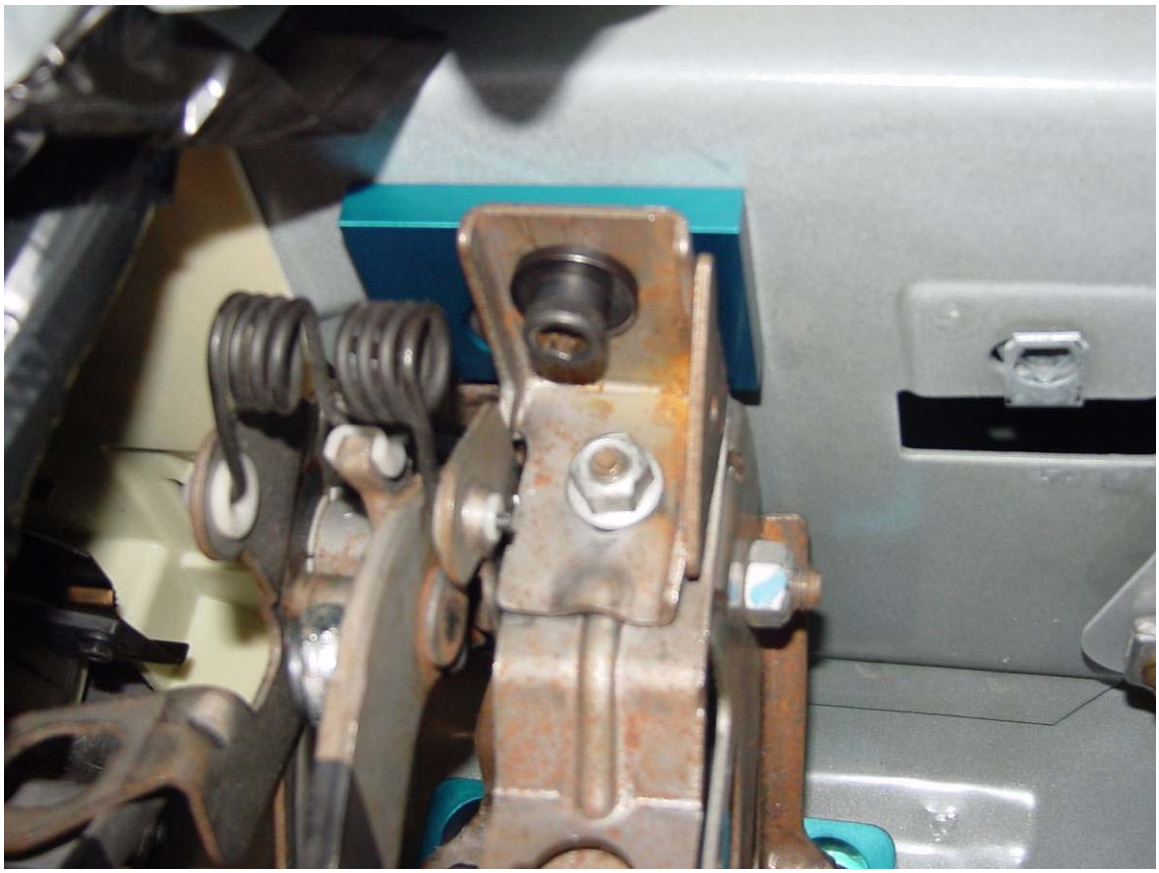

Figure 11 - Completed overhead bracket installation

44. Reattach the brake booster actuator rod to the brake pedal. The rod may have rotated while the booster was being moved, ensure that the orientation is such that the hole in the rod is below the centerline of the shaft. Note that the F Body pedals require a “E” Clip unlike the cotter pin used on the B Body pedal assembly. These can be obtained from the dealer if your pedal set didn’t come with them.

Figure 12 - Proper brake rod orientation

45. Insert the brake light switches to the top of the brake pedal and adjust so that the brake lights function properly. Note that the F-car pedals require a plastic retainer unlike the metal ones used on the B-car pedal assembly. These also can be obtained from the dealer if your pedal set didn't come with them.

46. Insert the cruise control switches and adjust as necessary.

47. From the engine bay side of the firewall, slide the clutch master cylinder through the adapter bracket. Fasten the master cylinder using the supplied 5/16" stainless socket head capscrews and torque to factory specs.

Figure 13 - Clutch master cylinder installed

48. Inside the car, connect the clutch master actuator rod to the clutch pedal and retain with an “E” Clip.

49. Remove the two nuts holding the master cylinder to the power brake booster. Place the reservoir bracket over the studs and then reinstall the nuts. Torque to factory specs.

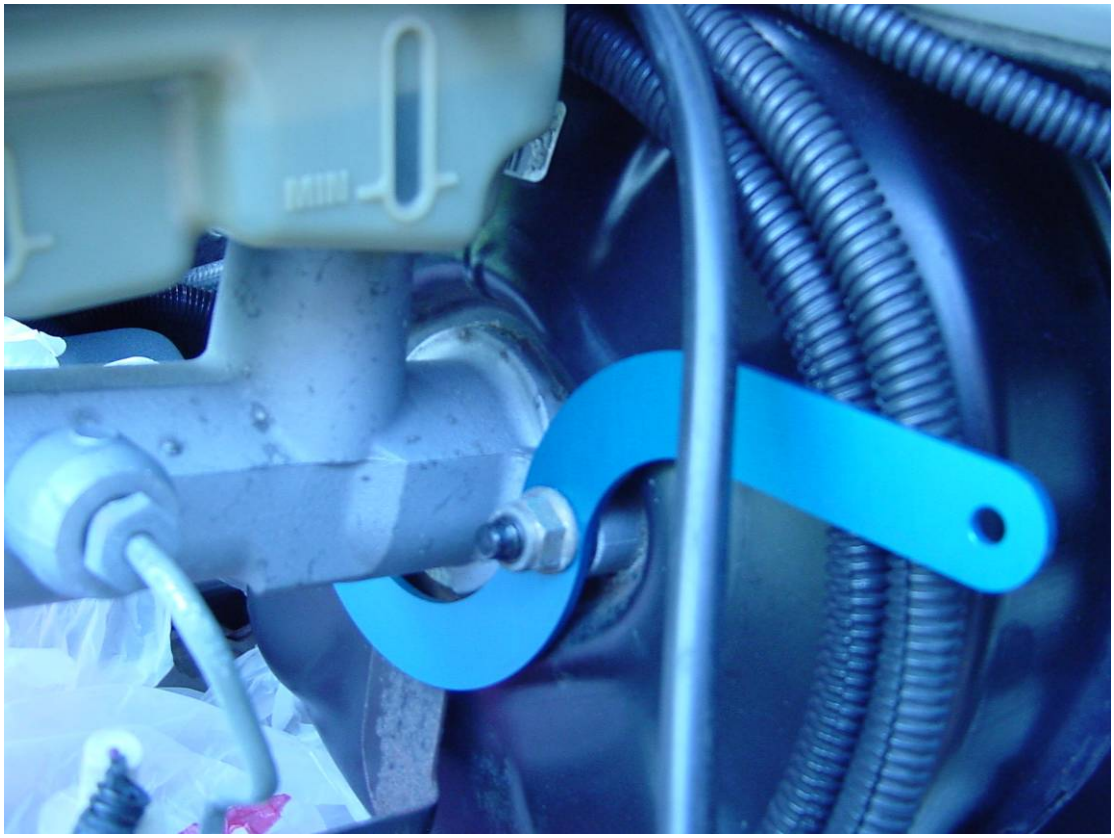

Figure 14 - Reservoir bracket installed

50. Using the ¼-20 button head capscrews and nuts, attach the reservoir to the reservoir bracket. Use care not to over-tighten the nuts and damage the soft nylon material.

Figure 15 - Clutch fluid reservoir installed

51. Using the supplied 10-32 screws, attach the convenience center bracket to the convenience center, then re-attach the convenience center bracket to the firewall using the original fasteners.

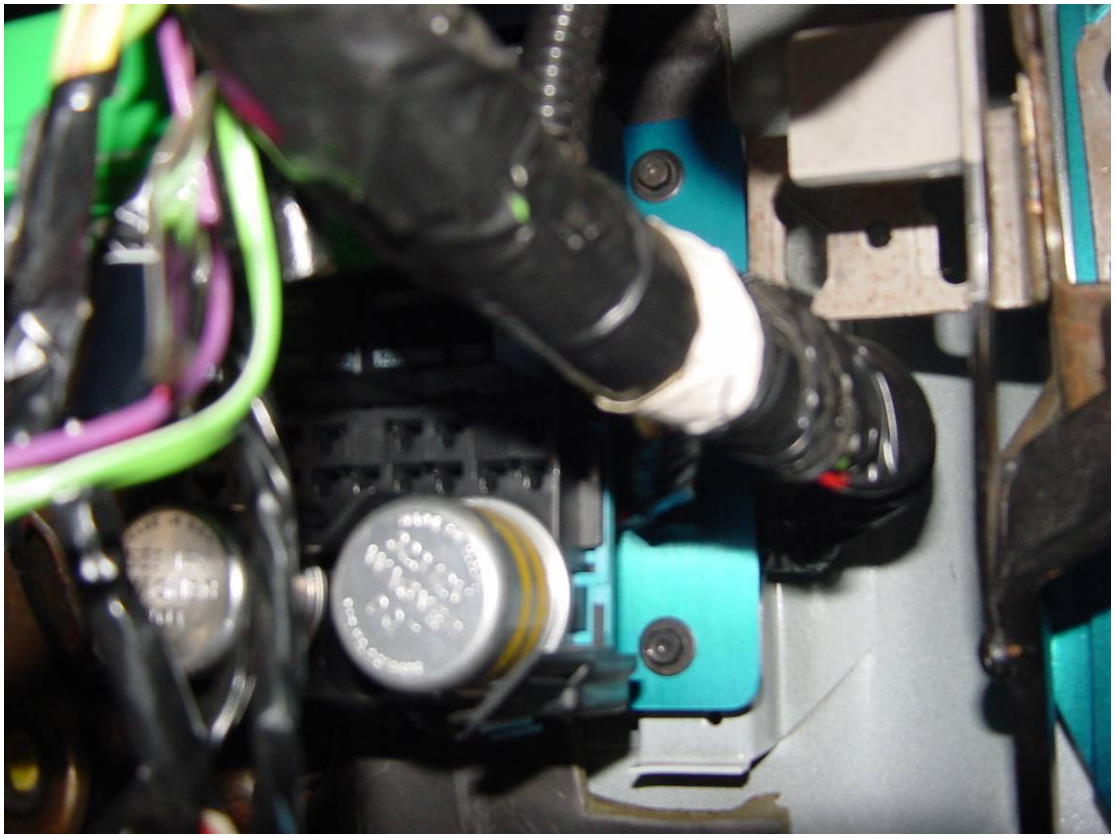

Figure 16 - Convenience Center relocated

52. Modify the cowl reinforcement plate removed in Step 6 by following the instructions found in Appendix C - Cowl Reinforcement Modification.

53. Install the modified cowl reinforcement plate.

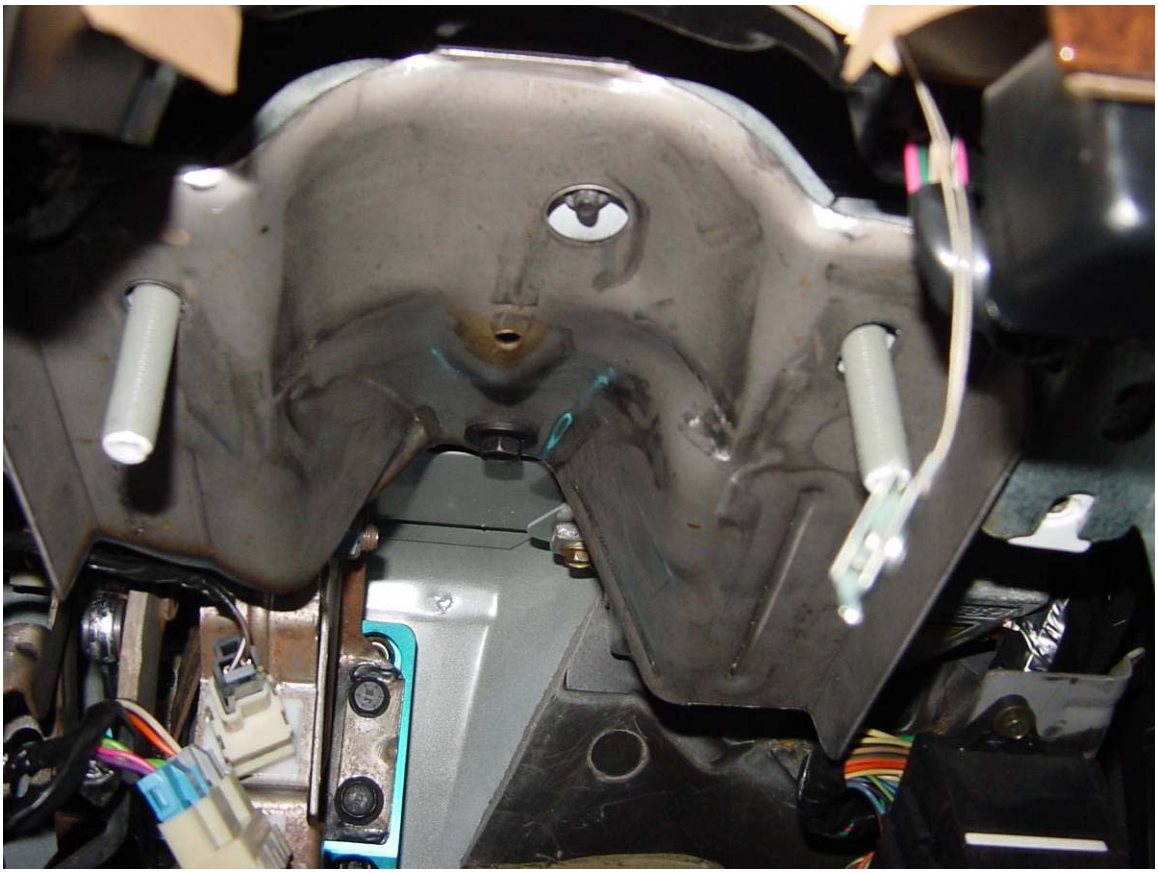

Figure 17 - Modified Cowl Reinforcement Installed

54. Reinstall the steering column. The toeplate bolt closest to the F2B bracket will have to be shortened to enable it to be inserted.

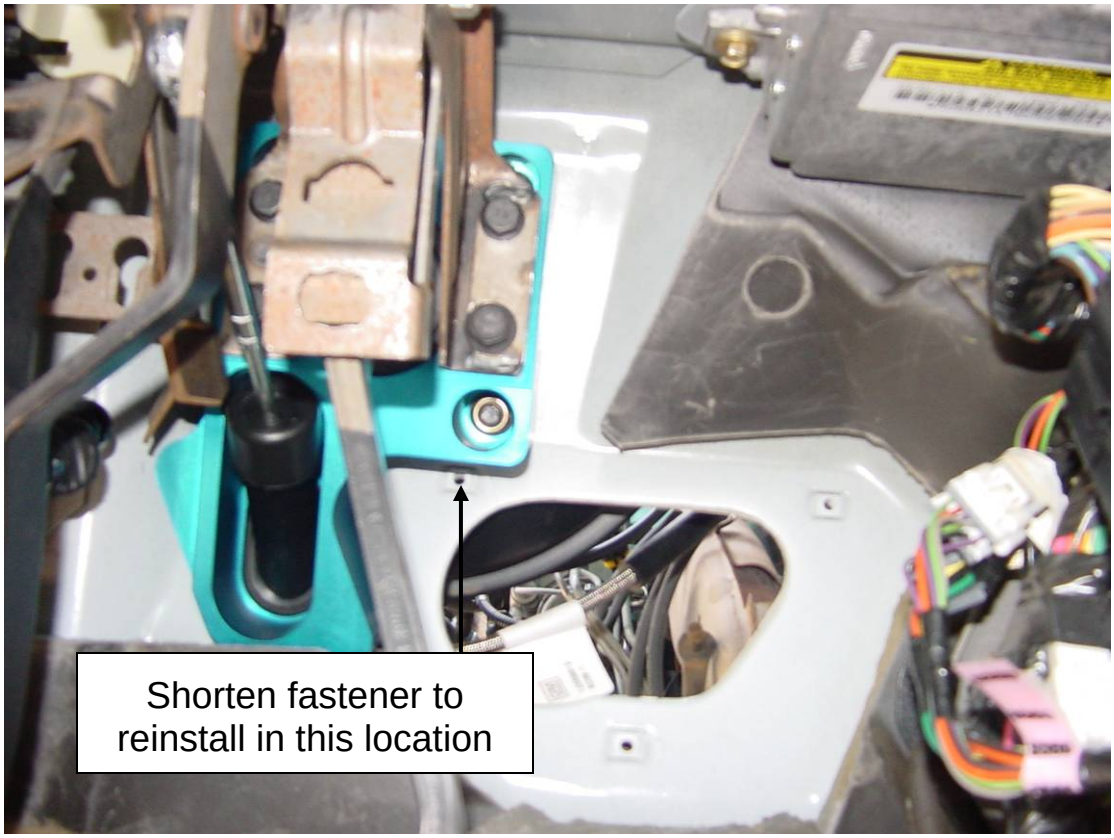

Figure 18 - Modified Cowl Reinforcement Installed

55. Re-install all parts removed in Steps 1- 4, and 17.

56. You have now completed the installation of the F2B pedal brackets.

B. T-56 Shifter Bracket Installation

NOTE: The relocation bracket is designed to work properly with the factory supplied shifter and lever. Aftermarket shifters and the Hurst unit fitted to the Z28 SS and Firehawk models may require the substitution of different bolts to accommodate the various configurations.

1. To mount the shifter bracket, remove the shift lever from the shifter assembly.

2. Using the supplied 8mm socket head capscrews, fasten the bracket to the shifter assembly.

3. Install the shift lever to the shifter bracket using the factory bolts. Torque all 4 fasteners to the factory specification.

4. You have now completed the installation of the F2B shifter bracket.

Appendix A F Body Pedal Assembly Modification

1. The below instructions detail how to prepare the F-Body pedal assembly for use with the F2B kit.

2. Remove the entire throttle pedal section from the F-Body pedal set by cutting just outboard of the right side mounting pad. This portion is not needed as the B-Body throttle pedal will be retained. Dress all edges to prevent cuts. Refer to the attached photo for reference.

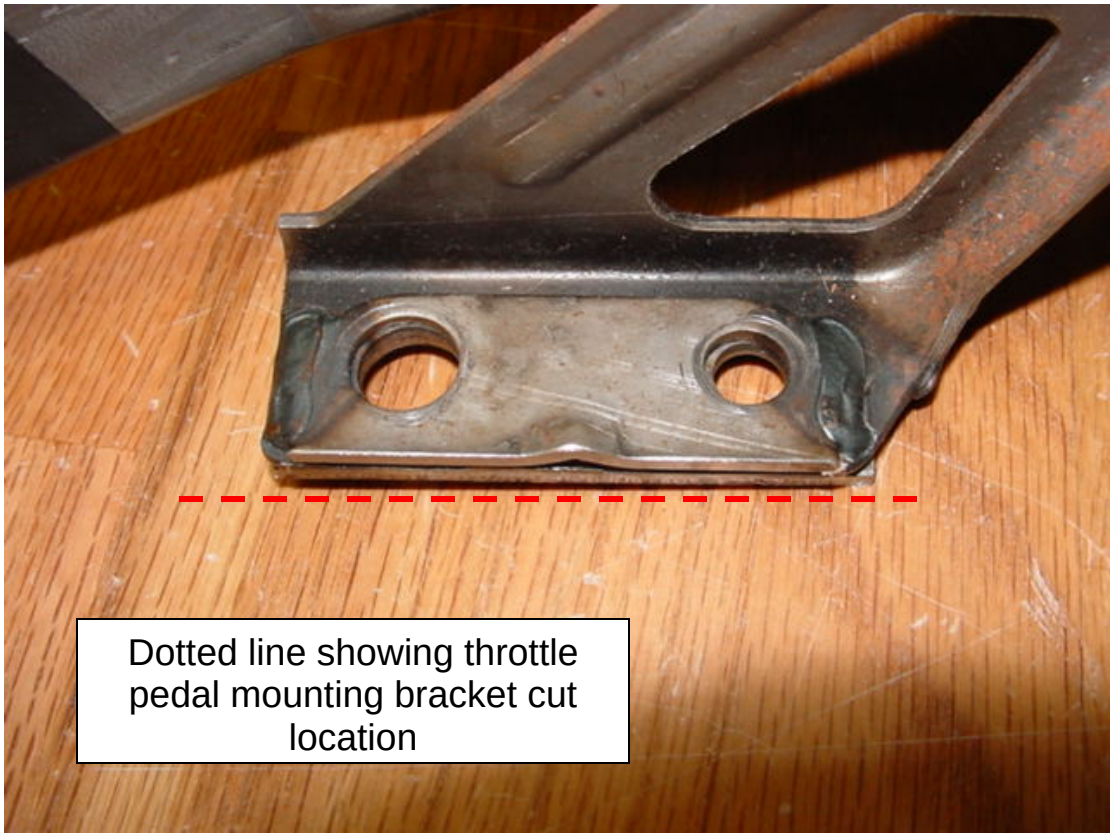

Figure A1 - Throttle Bracket Cut Location

3. Remove the reinforcement bracket for the clutch master cylinder by cutting about 1 inch below the clutch pedal stop. This portion is not needed as the F2B adapter bracket serves to mount the clutch master cylinder. Dress all edges to prevent cuts. Refer to the attached photo for reference.

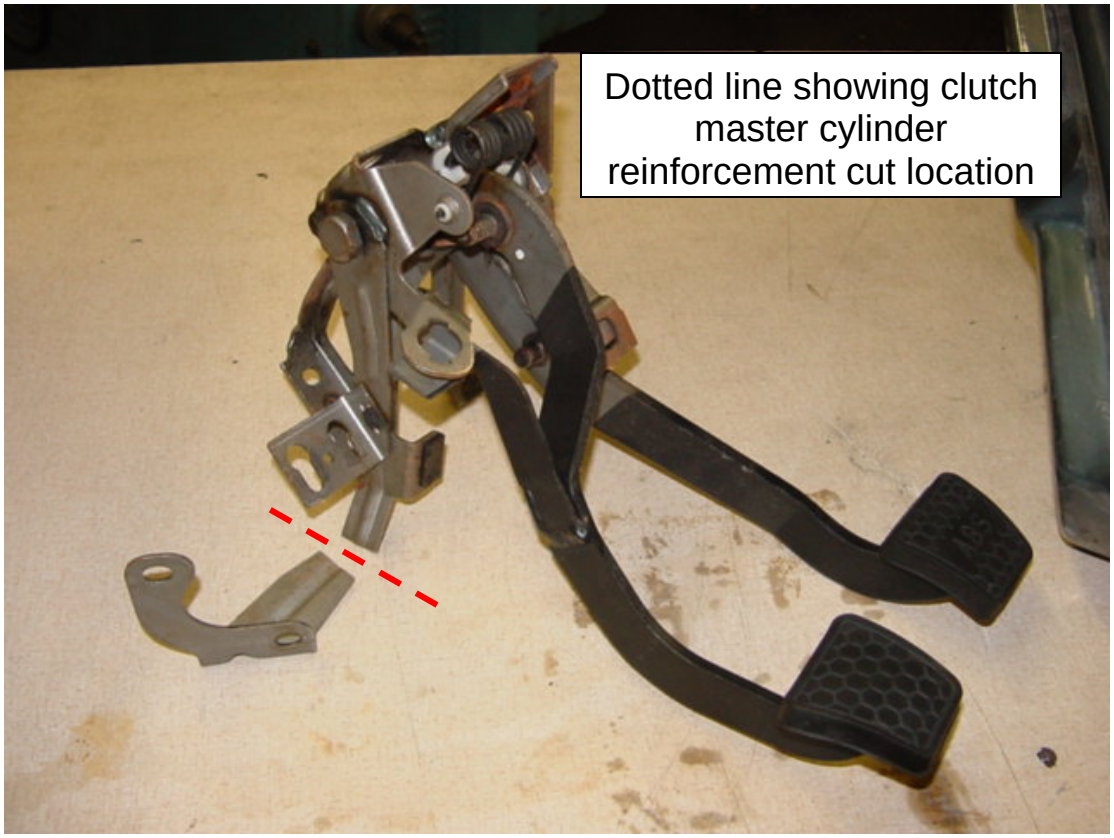

Figure A2 - Clutch Master Cylinder Bracket Cut Location

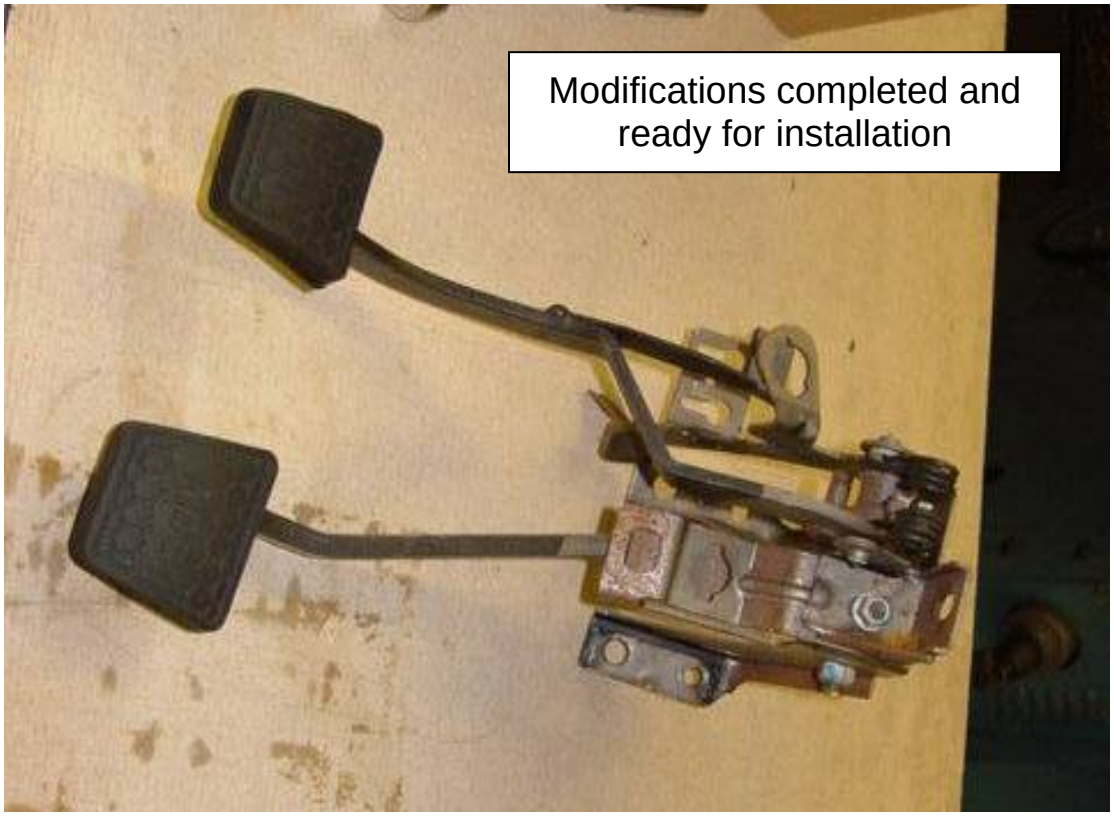

Figure A3 - Completed F Body Pedal Bracket

Appendix B Module Mounting Tray Modification

1. The below instructions illustrate how to prepare the module mounting tray for use with the F2B kit.

2. It will be necessary to trim the right side flange to clear the pedal assembly. On 1991 - 1994 model years, the bracket mounts the ABS controller in the area that will be trimmed away. It will be necessary to relocate the controller or hold it in place by some other means (tie wraps) after making this modification.

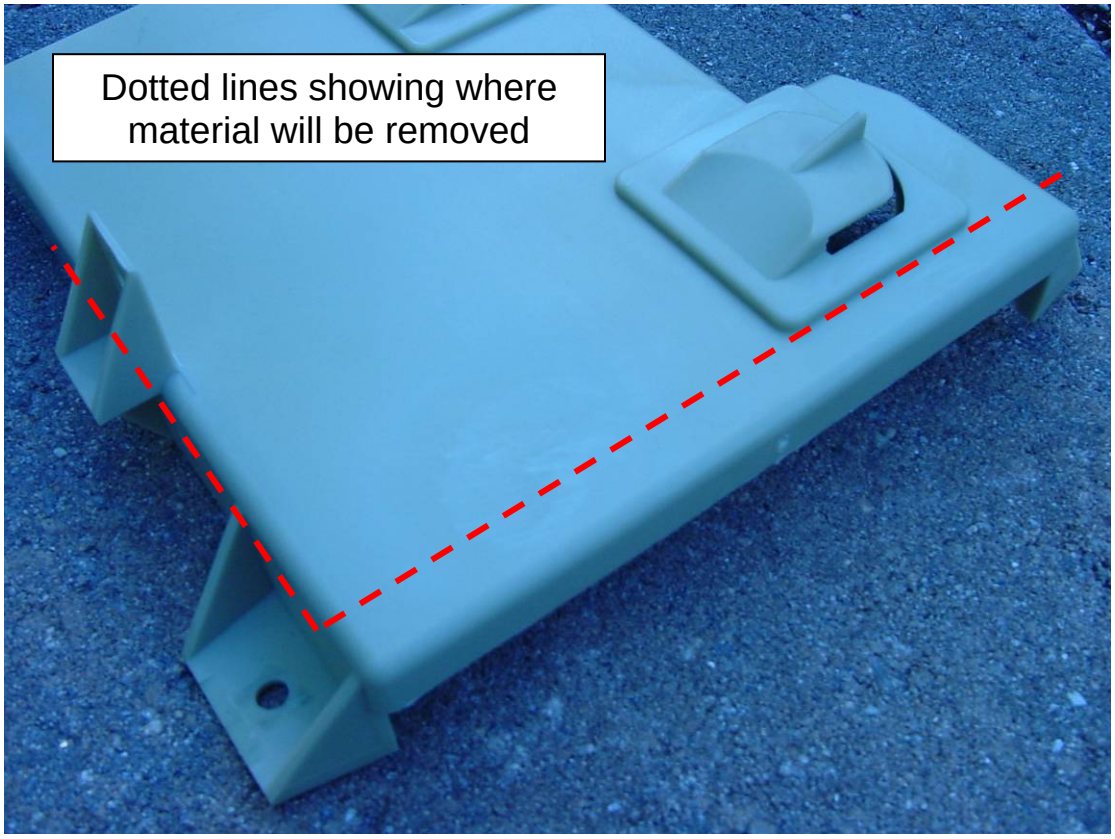

Figure B1 - Top View of Factory Tray

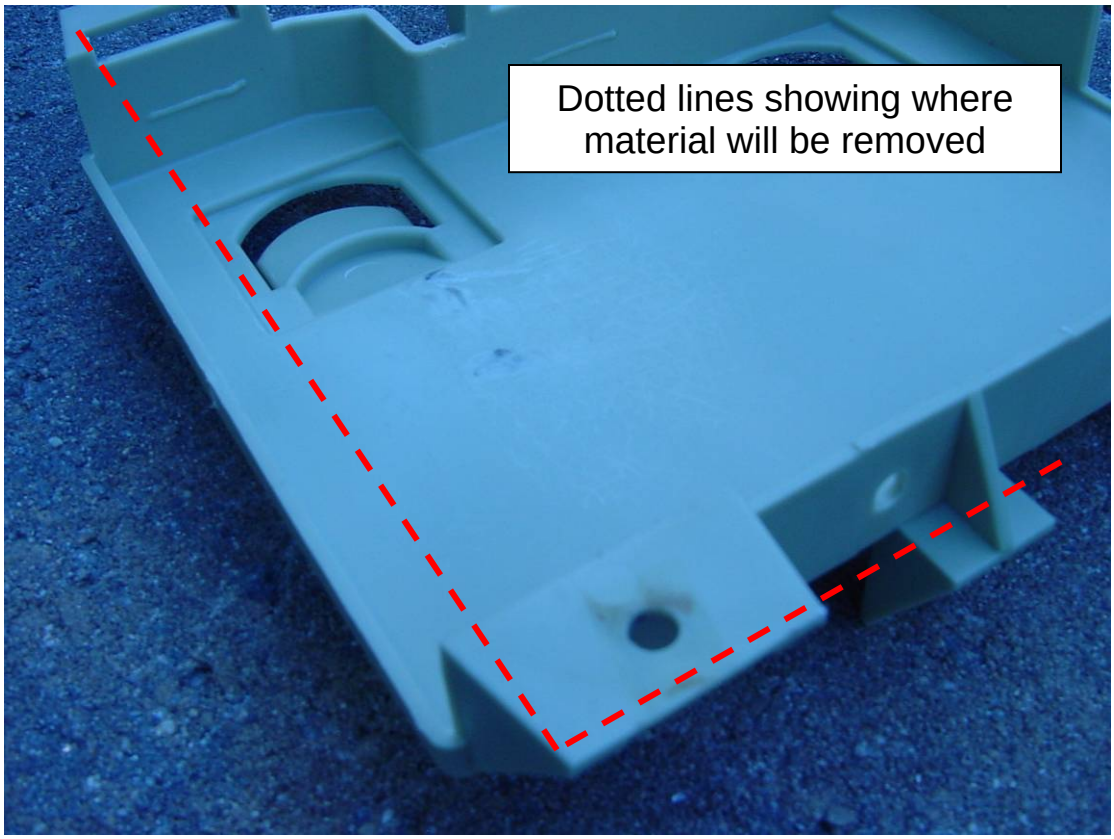

Figure B2 - Bottom View of Factory Tray

3. Remove the entire throttle pedal section from the F-Body pedal set by cutting just outboard of the right side mounting reinforcement. This portion is not needed as the B-Body throttle pedal will be retained. Dress all edges to prevent cuts. Refer to the attached photo for reference.

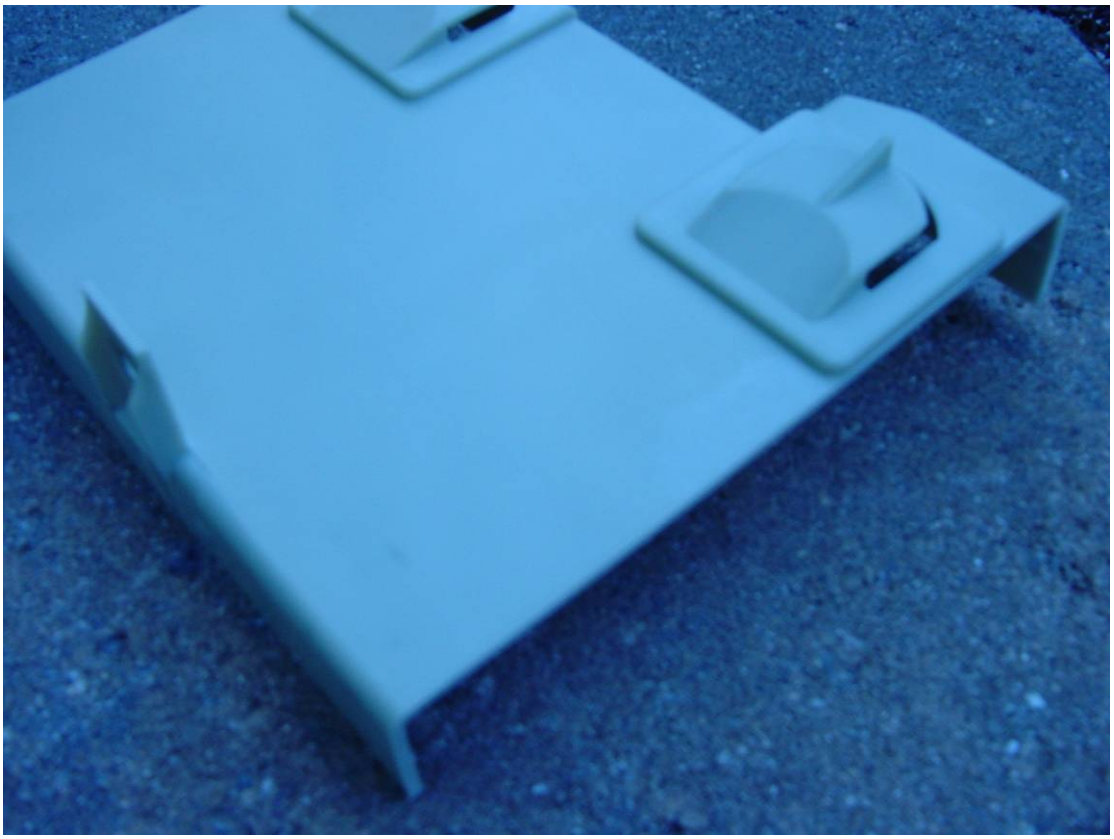

Figure B3 - Top View of Modified Tray

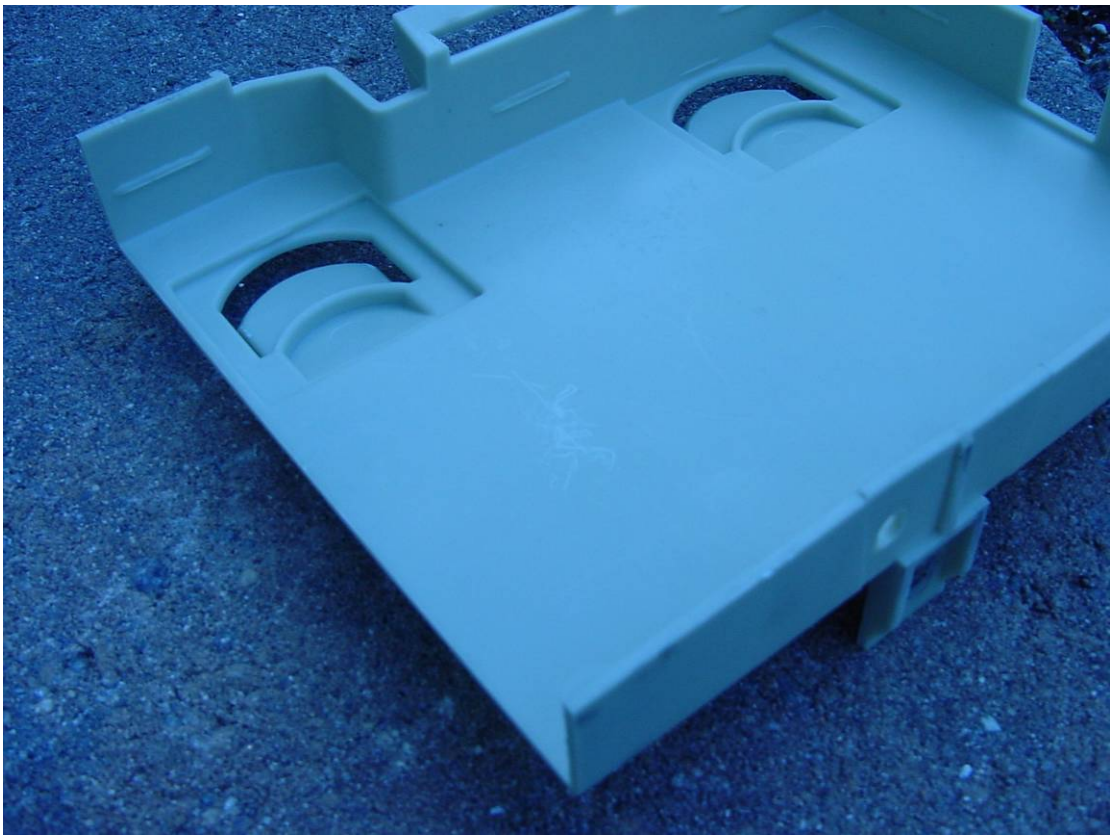

Figure B4 - Bottom View of Modified Tray

Appendix C Cowl Reinforcement Modification

1. The below instructions illustrate how to prepare the cowl reinforcing bracket for use with the F2B kit.

2. Remove material from the reinforcing bracket as the shown in the photo below.

Figure C1 - Modified Reinforcement Bracket