LINGENFELTER

PERFORMANCE ENGINEERING

Lingenfelter Signature Series 2010-2012 Camaro Ram Air High Rise Hood

PN: L850131410
PN: L850201410 (w/window)

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CAUTION
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Parts List

L850131410 Ram Air High Rise Hood

#	Description	Part number
1	LPE L28 Camaro ram air hood	38-4-006
1	Upper grille insert	XX03933-0004
1	Lower grille insert	XX03933-0005
6	5/32 ext. push-on retaining clip	FAS0423347
x	Hole plug	

L850201410 Ram Air High Rise Hood with window

#	Description	Part number
1	LPE L28 Camaro ram air hood with window	38-4-006
1	Upper grille insert	XX03933-0004
1	Lower grille insert	XX03933-0005
6	5/32 ext. push-on retaining clip	FAS0423347
x	Hole Plug	

Tools & Materials Required

- 13mm deep well socket
- Small flat head screwdriver
- Pry tool
- Torx 20 socket
- Ratchet
- Ratchet extension
- 3/16 inch (0.161”) drill bit
- Drill
- Torque wrench

Optional Items

#	Part number	Description
1	L850141410	Front Chin Spoiler
1	L850171410	Rocker Covers
1	L850161410	Rear Valance
1	L850151410	Rear Deck Spoiler
1	L850181410	Grille with fiberglass insert
1	L850191410	Grille with CF insert

Read the entire instruction manual before beginning installation. Some stock parts will be used in reassembly.

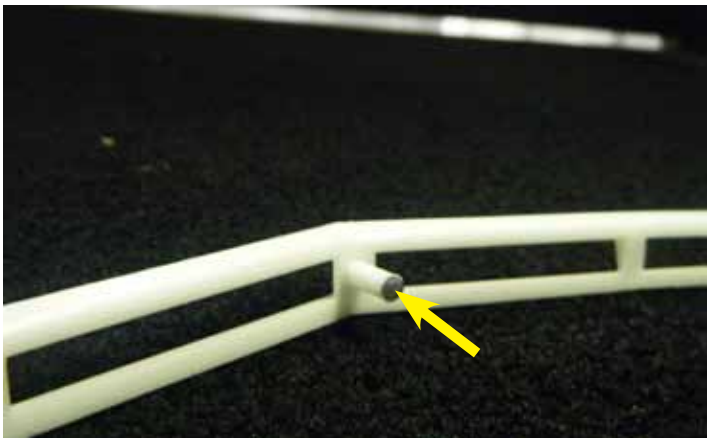
When referencing the side of the vehicle, the driver side of the vehicle is considered the left side and the passenger side of the vehicle is considered the right side of the vehicle.

Some installation pictures shown are with the body components unpainted. LPE recommends taking your vehicle to a professional painter to have your body components painted.

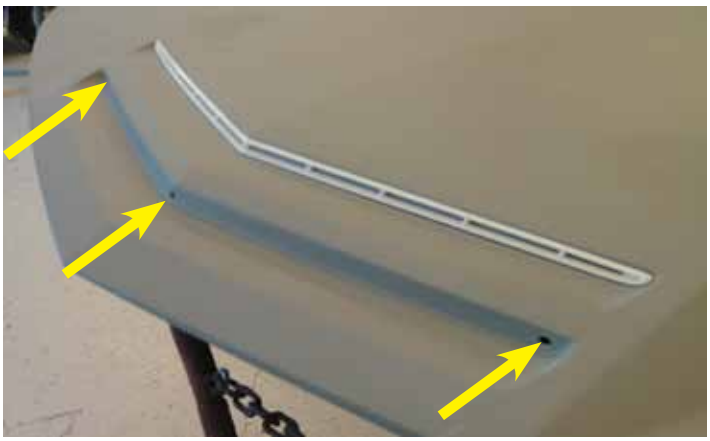
When painting the underside of the hood, please be careful to either mask off the Lingenfelter plaque or drill it out, paint the hood and rivet the plaque back into place.

Step 4 is optional and is not required to install the LPE hood.

1. **Step 4 is only required if you are installing the LPE hood grille inserts for functionality.** Installation of the grille inserts requires drilling 6 holes into the upper and lower grilles, three (3) per grille insert.

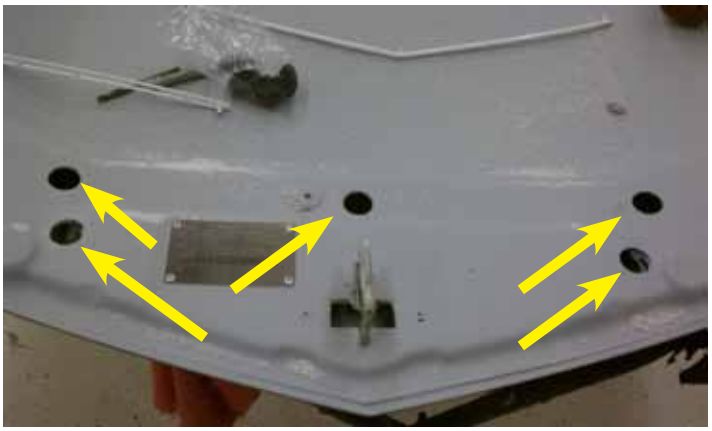


2. The best way to mark the drill hole positions is to put paint on the tip of each tab on the insert and put it in place leaving marks with paint on the hood.



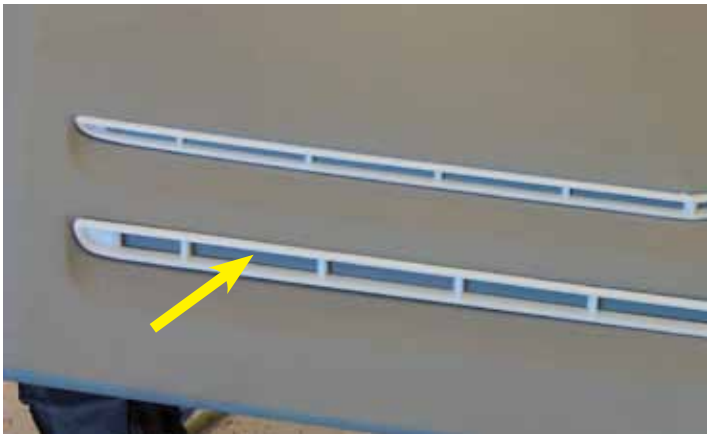
3. Drill the holes in the previously marked locations with a 3/16 inch or 0.161” drill bit. There will be 6 holes total.

NOTE: The holes need to be drilled as shown by the arrows.



4. On the inside of the LPE hood you need to make holes about an inch in diameter in order to get to install on the clips. If your making your ram air hood functional then you need to proceed to the next step. If you are not making the ram air hood functional, install the clips (FAS0423347) permanently installing the hood grille inserts and skip step 4.

⚠CAUTION



5. Insert the grille inserts and using a pencil, sketch out each slot on the grille insert so that there are slot marks left on the hood. Cut these slots out using a cutting tool (or equivalent). Once all slots are cut, using sand paper, sand down the rough edges made by the cutting tool. Once sanded install the retaining clips (FAS0423347) when the inserts are placed onto hood through the back of the hood. These are pressed on.

NOTE: Be sure all debris is cleared out of the ram air sections, including inside. Use an air blower if necessary.

6. Open the hood of the vehicle. Lingenfelter Performance Engineering recommends having the help of an assistant when installing and positioning the ram air hood.

7. Prepare a clean, padded surface for your old hood.

8. Remove the washer fluid line from under the hood stop pad located on the driver side of the engine bay as shown.

9. Disconnect the windshield washer water line connector by squeezing the connector and pulling the two lines apart.

10. The hood is connected by two (2) 13 mm nuts on the driver and passenger side (four nuts total). Loosen the two (2) nuts on the driver side but do not remove them completely.

11. Loosen the two (2) nuts on the passenger side but do not remove them completely.

12. Locate the hood prop snap fitting on the underside of the hood. You need to insert a small flat head screwdriver into the slot behind the retaining ring as shown.

13. While an assistant holds the hood in place, use a small flat head screwdriver (or equivalent) to pry the retaining clip back on the hydraulic prop rod and pull the prop rod away from the hood until it pops out of the snap fitting.

14. Using a 13 mm deep well socket, remove the prop rod snap fitting joint. Be sure to keep the snap fitting joint as it will be re-used.

15. While holding the hood in place, completely remove the four (4) nuts securing the hood to the hood mounting brackets. Set the hood aside on a soft clean surface.

16. With the help of an assistant, mount the LPE ram air hood and start each of the four (4) 13 mm nuts that secure the hood to the hood mounting brackets. Do not tighten the bolts completely.

⚠CAUTION

17. Using a 13 mm deep well socket, install the prop rod snap joiny fitting into the ram air hood. Be sure to have an assistant hold the hood up while you install the hood prop rod. Take care to ensure this is tight and secure but be sure to not overtighten.

18. Press the prop rod onto the snap fitting joint/fastener until it snaps into place.

19. Tighten but do not torque down the four (4) nuts that secure the hood to the hood mounting brackets.

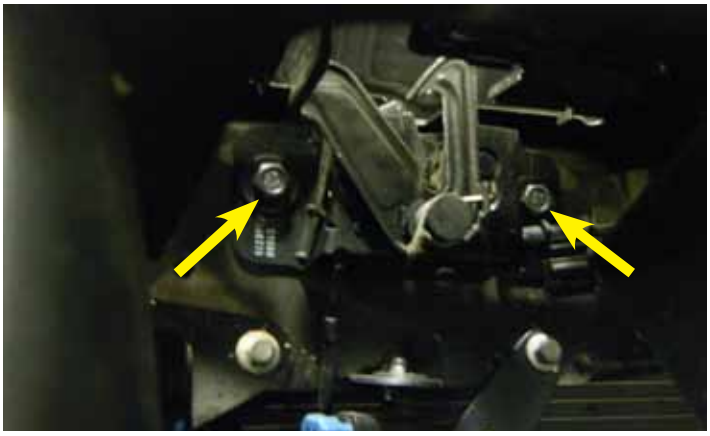
20. Slowly close the hood. Be careful not to damage the LPE hood or fenders. Check the hood lines and make a note of where you need to adjust the hood from the passenger and driver side.

21. Check the front of the hood for any gap and make note of whether the hood needs to move up or down relative to the front fascia.

22. Using a Torx-20 socket and ratchet, adjust the front fascia up/down by turning the fascia adjustment bolts clockwise/counterclockwise to line up with the hood.

NOTE: Turning the adjustment bolts clockwise moves the fascia upward. Turning the adjustment bolts counterclockwise moves the fascia downward.

23. Adjust the two (2) rubber hood stops to move the hood up or down depending on which way the adjustment needs to be made. This adjusts the height of the hood when closed.



24. If your hood will not latch you may need to adjust the hood latch upward. Using a 10 mm socket and extension, loosen the two (2) hood latch bolts located directly behind the front grille emblem. Pull up on the hood latch and tighten the two (2) 10 mm bolts. The arrows show the location of the 10 mm bolts.

25. Using a 13 mm socket and ratchet, torque the four (4) hood nuts to the hood mounting brackets and adjust as necessary to properly align the hood. Torque these nuts to 18 ft-lbs (25 N-m). The hood bolts can move in any direction so you may need to repeat this process several times in order to properly align the hood.

26. This illustration shows the other rubber hood adjusters location on the hoods hinge.

27. Close the hood and check for alignment on the passenger and driver side, as well as the front of the hood relative to the fascia. You may need to repeat steps 11-17 several times to properly align the hood with the fenders and front fascia.

28. Using a pry tool (or equivalent), remove the three (3) windshield washer water line retaining clips from the stock hood.

29. Remove the windshield washer water line bracket from the underside of the hood by pulling up from the middle of the bracket.

30. Install the windshield washer water line bracket on the underside of the LPE ram air hood as shown. The bracket will snap into place.

31. Pop the three (3) plastic windshield washer water line retaining clips into place.

32. Re-connect the windshield washer water line by snapping the line back into the outline line as shown.

⚠CAUTION

33. Route the windshield washer water line under the foam hood stop indicated.

34. The installation of your LPE ram air signature series hood is now complete.

For additional product installation information and technical support, contact LPE or your LPE products distributor. You can also find technical support and usage discussions regarding this product and many other LPE products in our Internet forums:

http://www.lingenfelter.com/LPEforumfiles

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