



**Firestorm Hisun/Coleman 500/700 Cab Heater
HT_CP-456**

23001 Industrial Blvd
Rogers, MN 55374
866.527.7637

HISUN/COLEMAN 500/700 CAB HEATER KIT INSTALLATION INSTRUCTIONS

Please read all instructions before beginning installation. When working on cooling systems always allow vehicles to cool to avoid being burned or scalded by hot coolant.

Before working with any electrical system on your vehicle, ALWAYS remove the negative battery cable and secure it away from the battery terminal.

Please check your kit with the parts list and picture below for all required parts.

Part #	Qty	Description
	1	Firestorm Cab Heater
	1	Standard Heater Mounting Bracket
	1	Right Hand Mounting Bracket
	1	Left Hand Mounting Bracket
	7	Large Cable Ties
	4	#10 Hose Clamps
	4	#16 Hose Clamps
	1	24" Wiring Loom
	1	1 1/4" Hole Saw
	2	7/8" Aluminum Ys
	4 ft	5/8" Radiator Heater Hose

Part #	Qty	Description
	1	Winch Remote Mounting Bracket
	2	Core Support Brackets
	1	Rubber Grommet
	8	1/4-20 Nylock Nut
	3	1/4-20 x 1 1/2" Serrated Flange Bolts
	6	1/4-20 x 3/4" Serrated Flange Bolts
	2	1/4 ID x 1/2" OD Spacers
	5	#10 x 5/8" Screws for Plastic
	4	1/4 Fender Washers
	2	Quick Connect Terminals



Please note: Before drilling holes, check area behind the firewall panel to make sure no damage will occur by drilling holes.

Important Tip: Raise the front of vehicle on jack stands or ramps before draining cooling system. This will help in preventing air locks and you won't have to drain the whole cooling system.

Cab Heater Installation

1. Remove the winch remote mount and discard.
2. Unscrew the winch remote plug and leave hanging as shown in Figure 1.

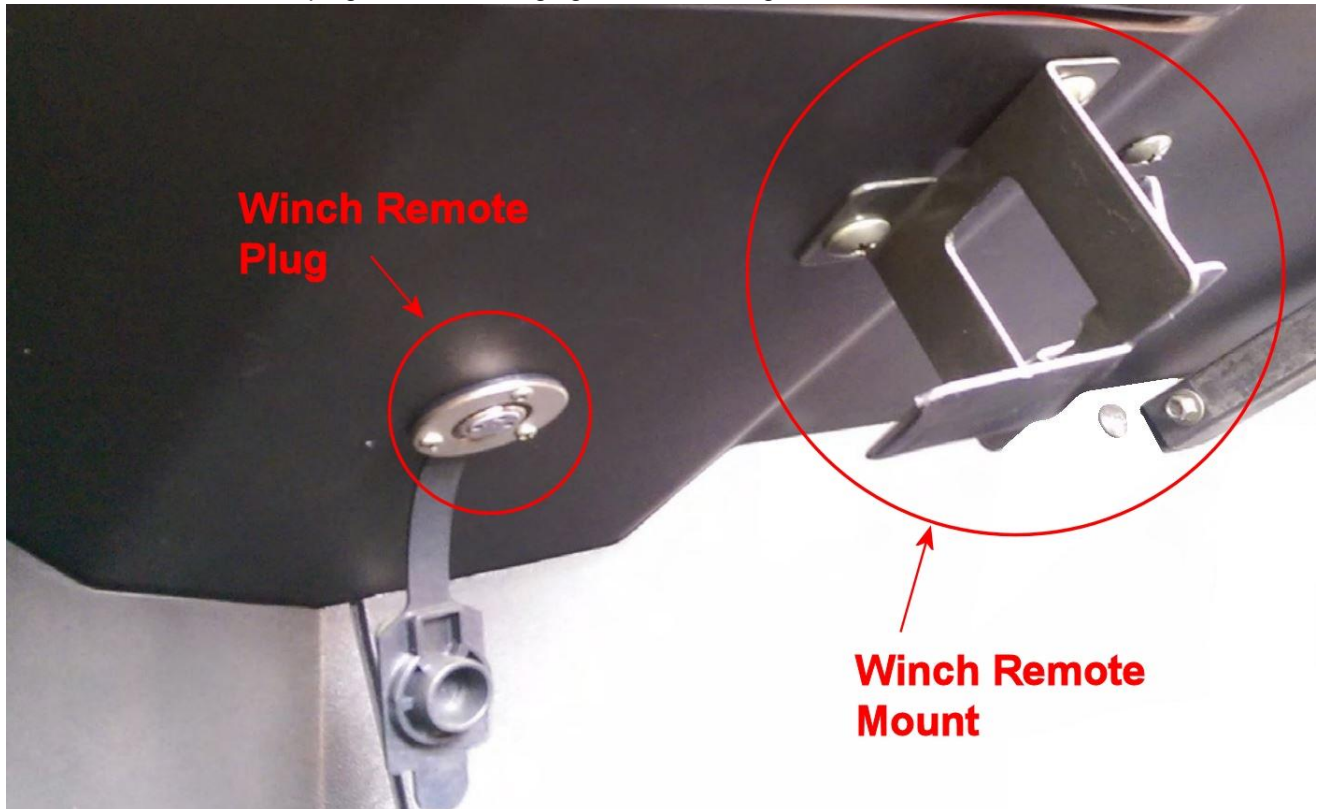


Figure 1

3. Remove the two lower, inner speaker housing bolts as shown in Figure 2.



Figure 2

4. Install the Main Heater Mounting Bracket to the heater as shown in Figure 3. Attach using the supplied #10 x 5/8" Screws for Plastic on both the top and bottom side of the bracket.

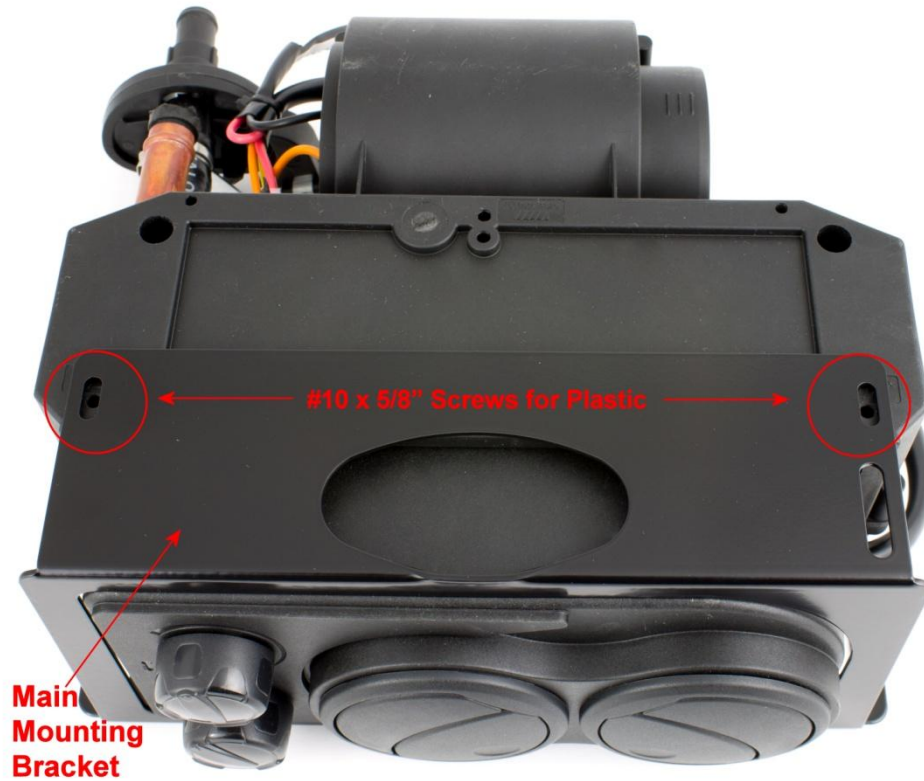


Figure 3

5. Flip the heater over and install the Right Hand and Left Hand Mounting Brackets on the Main Heater Mounting Bracket as shown in Figure 4.

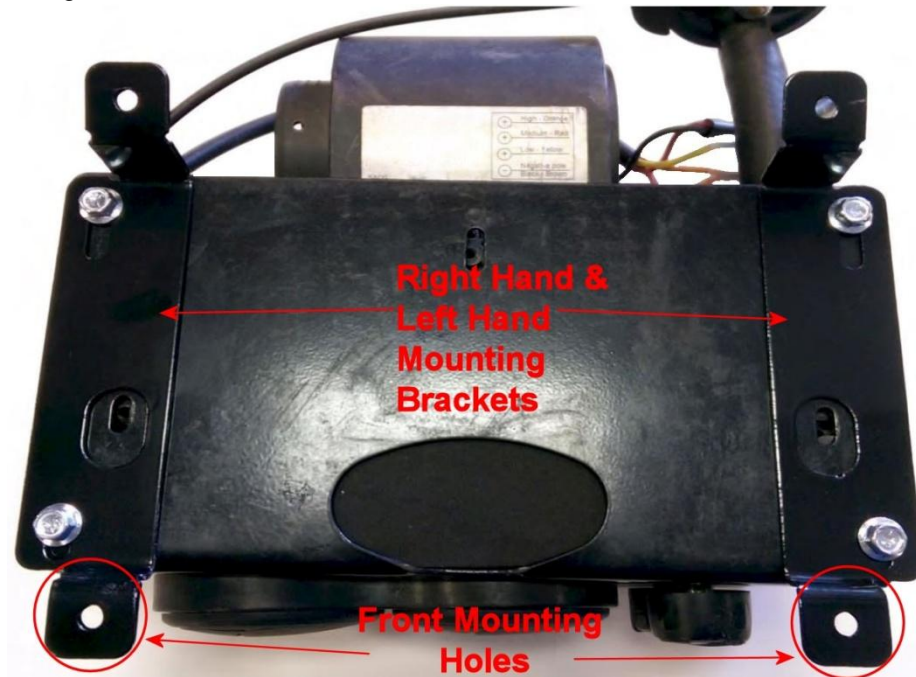


Figure 4

6. Lift up heater up into the position as shown in Figure 5.



Figure 5

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7. Fit two (2) 1/4" x 1 1/2" Serrated Flange Bolts through the two rear holes of the heater mounting brackets.
8. Place a 1/4" ID x 1/2" OD Spacer on the bolts.
9. Fit the flange bolts through the inner speaker housing bolt holes.
Please Note: Hole may need to be enlarged using a 1/4" drill bit
10. With the heater pressed firmly against the dash, mark the front mounting holes through the heater mounting brackets onto the dash panel.
11. Remove the heater.
12. Using a 1/4" drill bit, drill mounting holes in the underside of the dash.
Please Note: Before drilling the holes, check the area behind the dash panel to make sure no damage will occur when drilling
13. Cut out the supplied Heater Hose Hole Template.
14. Using the template, mark the 1 1/4" hole saw centers as shown in Figure 6 and remove the template.



Figure 6

15. Carefully drill the heater hose holes using the supplied 1 1/4" Hole Saw and Pilot Bit.
Please Note: Before drilling the holes, check the area behind the dash panel to make sure no damage will occur when drilling
16. Place the supplied Rubber Grommet into the lower 1 1/4" hole drilled previously.
17. Pass each end of the supplied 5/8" Heater Hose through the holes in the firewall from the **radiator side** of the firewall - **do not cut the hose to do this.**
18. Attach the 5/8" Heater Hoses to the Heater Unit (*note the lower hose clamp placement*):
 - Top heater hose to the temperature control valve
 - Lower hose to the heater core pushing the hose completely on the fitting

19. Install the Core Support Brackets to hoses as shown in Figure 7. **Do not over tighten through bolt.**

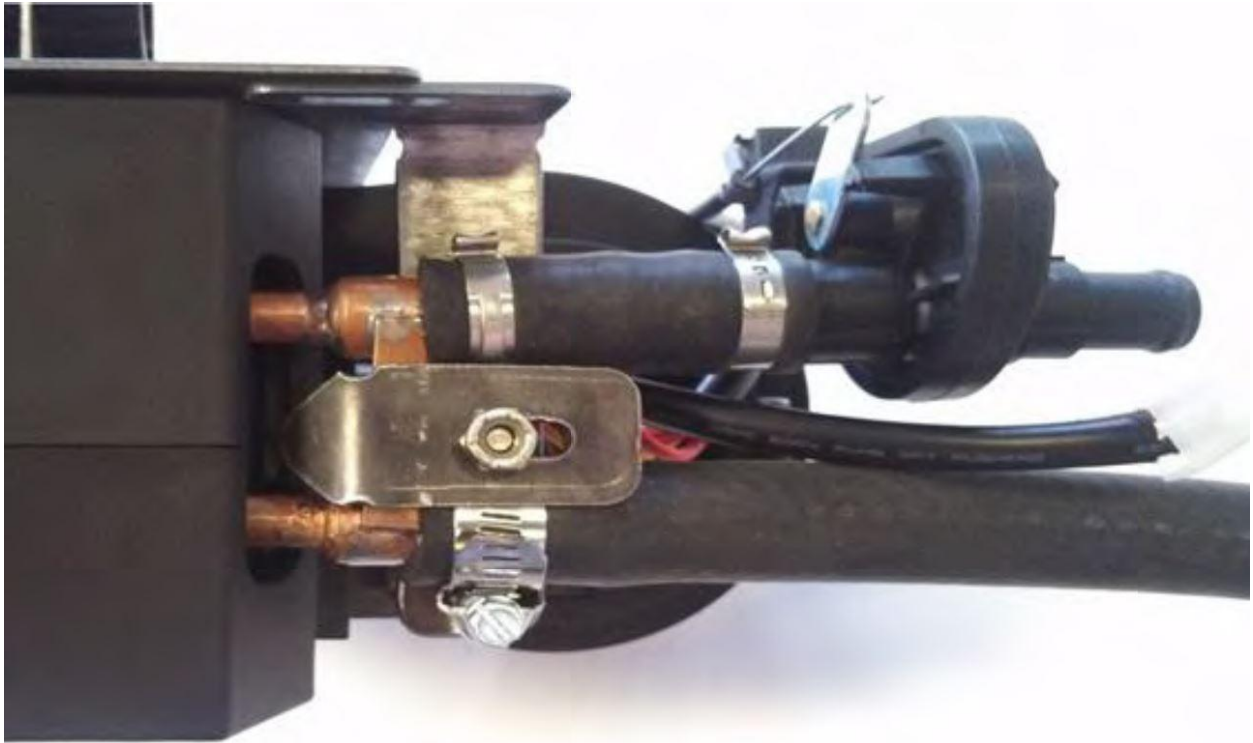


Figure 7

20. Connect the Wiring Loom to the Heater:
- red wire to red
 - black wire to black
21. Run the Wiring Loom through the winch plug hole in the underside of the dash panel and up to the aux. power outlet using the supplied Quick Connect Terminals.
22. Reconnect the battery; turn the key on to check fan operation.
23. Disconnect the battery and use Cable Ties as necessary to secure the Wiring Loom.
24. Have a helper hold the heater into position by pushing the Heater Hoses back through the Rubber Grommet.
25. Fit the supplied $\frac{1}{4}$ " x $1\frac{1}{2}$ " Serrated Flange Bolts through the two rear holes of the heater mounting brackets.
26. Place the supplied $\frac{1}{4}$ " ID x $\frac{1}{2}$ " OD Spacers on the bolts.
27. Fit the Flange Bolts through the inner speaker housing bolt holes.
28. Install supplied $\frac{1}{4}$ " x $\frac{3}{4}$ " Serrated Flange Bolts through the two front holes of the heater mounting bracket.
29. Use the supplied Fender Washers and Nylock Nuts on each of the mounting bolts. **Do Not Tighten Fully.**
30. Adjust the heater position and fully tighten the Flange Bolts and Nylock Nuts.

31. Attach the winch remote plug to the supplied Winch Remote Plug Mounting Bracket with a bolt as shown in Figure 8.

Please Note: you may have to unclip some of the winch remote plug loom to reach the area.

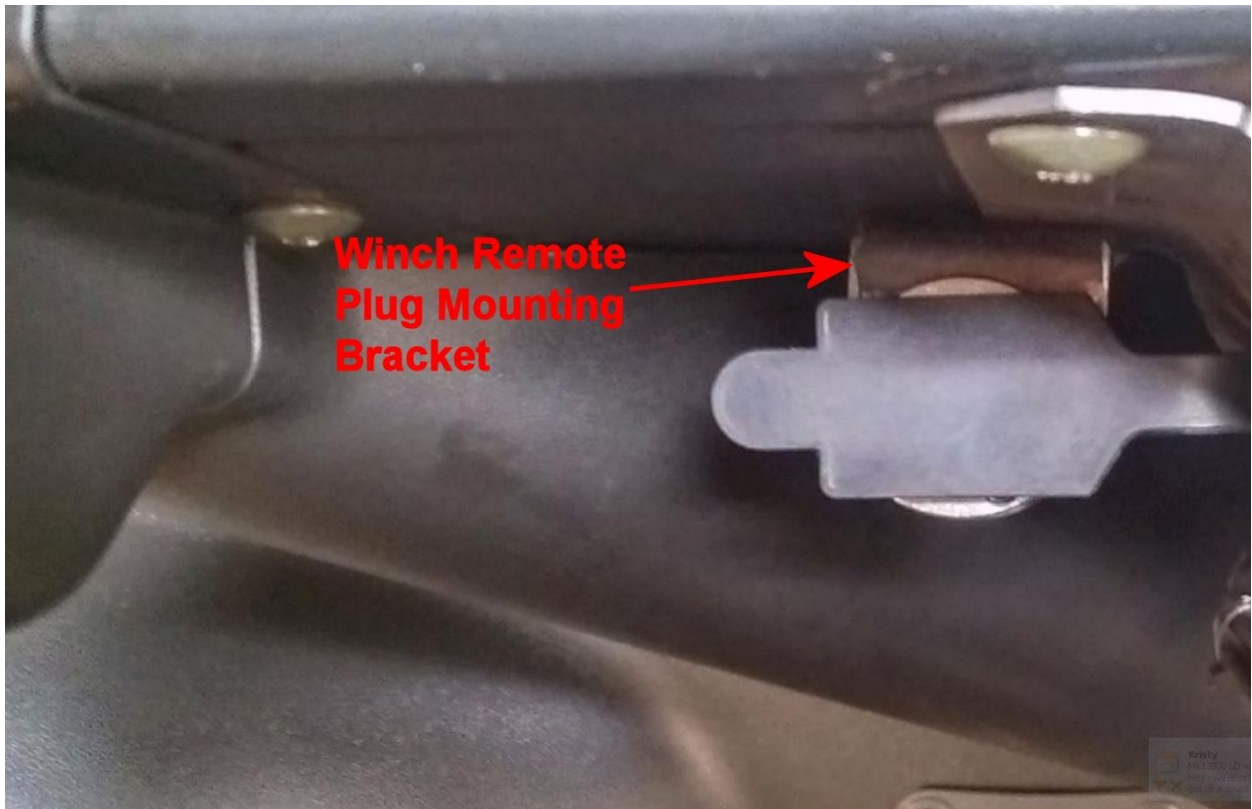


Figure 8

32. Tighten the mounting bolt.

Coolant Setup

1. Drain the cooling system by removing the lower radiator hose.
Important Tip: Raise the front of the vehicle on jack stands or ramps before draining the cooling system. This will help in preventing air locks and you won't have to drain the whole cooling system.
2. Place an Aluminum Y Connectors as shown in Figure 9 and Figure 10



Figure 9



Figure 10

3. Cut the radiator hoses at approximately the middle of the Aluminum Y Connector.

4. Insert the Aluminum Y Connectors into the Radiator Hose exactly as shown in Figure 11.
Before cutting the radiator hoses, be sure that the placement of the Y's will not interfere with any part of the vehicle. Make sure there is enough hose to connect to the heater fittings. Be sure the hose connected to the temperature control valve of the heater is connected to the top radiator hose.

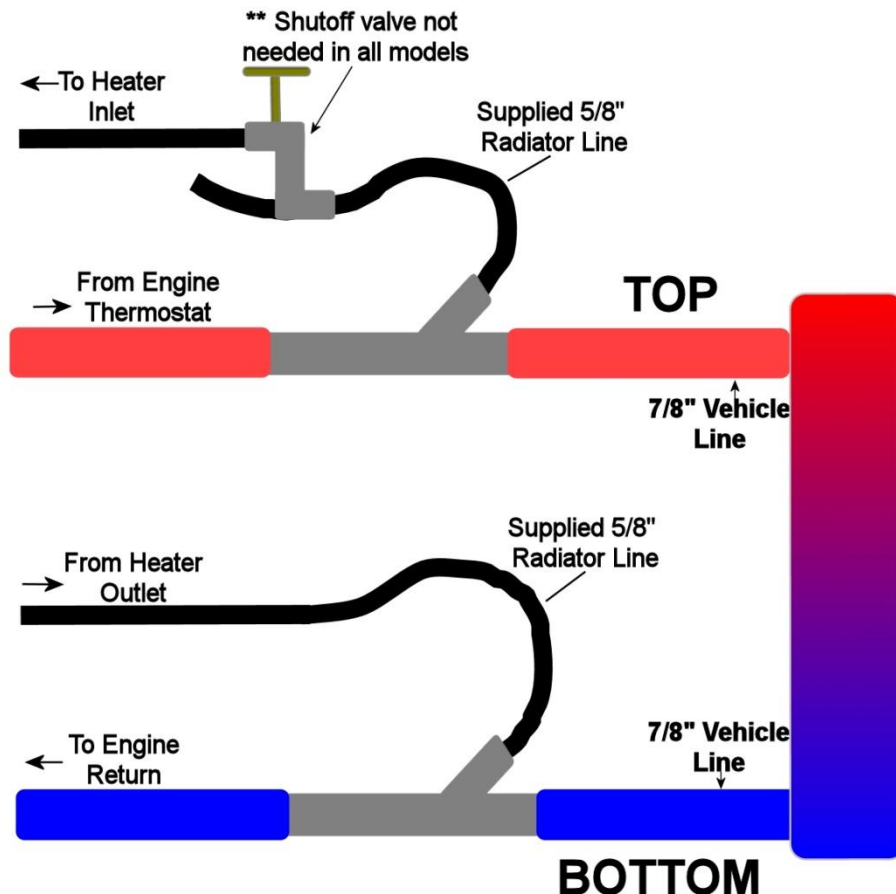


Figure 11

5. Cut the Heater Hose to length.
6. Before connecting the Hoses to the Y Connectors, we recommend using a garden hose to run water through the heater hose and heater assembly. **This step must be carried out** as it forces air bubbles out of the heater core. Filling the heater core without the pressure of the garden hose leaves the chance for air pockets inside the core. This will lead to no or limited heat during operating.
7. Fit the hose to the Y Connectors and tighten the Clamps. Make sure all hoses are as far away as possible from the driveshaft, steering shaft and sharp areas, etc.
8. Use Cable Ties as necessary.
9. Refill the cooling system as per the manufacturer's procedure.
10. Start and run the vehicle at a fast idle and run up to normal operating temperature.
11. Check for leaks.
12. Check the heater operation.



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13. Allow the vehicle to cool and recheck the cooling system level and coolant ratio. Fill and/or alter the coolant ratio as required. If the heater fails to blow hot/warm air once the vehicle is up to operating temperature, there may be an air lock in the heater unit.
 14. Temporarily block off the top/inlet radiator hose between the Y fitting and radiator.
 15. Start and run the vehicle up to operating temperature.
 16. Feel the outlet/lower hose from the heater until it feels hot. The heater now should be blowing hot/warm air. Remove the clamp from the radiator hose. The heater should continue to blow hot/warm air. This procedure may have to be repeated a few times to remove the air from the system. Allow the vehicle to cool, restart the vehicle and run up to operating temperature. Recheck the heater operation.
- Please Note:** *the heater output will be limited at idle. All testing should be done at a fast idle.*



Installed View

Before Your Next Ride:

Verify that no leaks have occurred and that the radiator fluid level is per the manufacturer's specifications.