

ITEM	PART NO.	DESCRIPTION	QTY.
1	4001783	Rear Mounting Bracket	1
2	4001775	Front Mounting Bracket	2
3	0070266	11 x 8 x 1-½" Super Cooler	1
	70291BA	Hardware Pack	1
4	3401583	¼-20 x ¾" Carriage Bolts	6
5	3401598	¼" Flat Washer	6
6	3401557	¼" Split Lock Washer	6
7	3401555	¼-20" Nut	6
8	3401584	10-32 x ½" Screw	1

ITEM	PART NO.	DESCRIPTION	QTY.
9	3401587	10-32 Flat Washer	1
10	3401588	10-32 Lock Washer	1
11	3401589	10-32 Nut	1
12	3401609	17MM Cross Bolt Hose Clamp	6
13	8700154	¾ x ¾" Straight Barb	2
14	8700152	½ NPT x ¾" 90° Barb	2
15	5500630	¾" Transmission Oil Cooler Hose	1
	3401602	12" Cable Tie	6

OVERVIEW:

Thank you for purchasing **B&M 70291 Automatic Transmission Cooler**. This kit works on automatic transmissions, even though tubing layout may vary slightly from model to model. Be sure to acquire your vehicles factory recommended transmission fluid in the event of spills or leaked fluid during install process.

B&M also offers the following related product:



Wrangler JK PS Cooler (70301): This product can be installed alongside your Automatic Transmission Cooler to further safeguard against overheating.



1. Please take a moment to read and understand these instructions before installing your purchased performance kit. Use the parts drawing and list to verify kit contents.

PREPARE VEHICLE FOR YOUR B&M TRANSMISSION COOLER INSTALL:

WARNING:

Avoid serious burns! Allow vehicle time to cool completely before handling stock engine components.



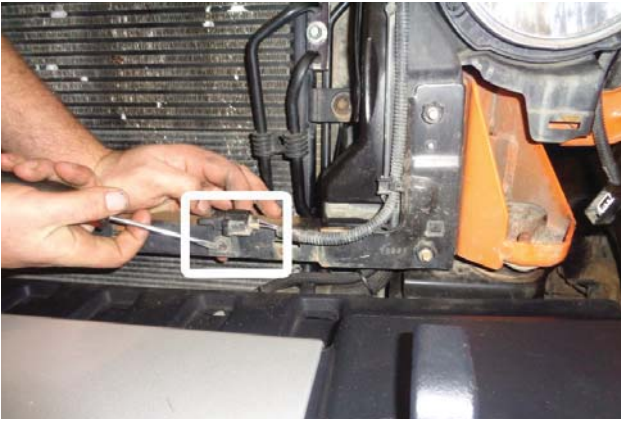
2. Unplug turn signals (x2) by sliding back tab, depressing lever and pulling out connector.



3. Remove push pins (x6) holding grill cover to vehicle frame. Retain pins for later use.

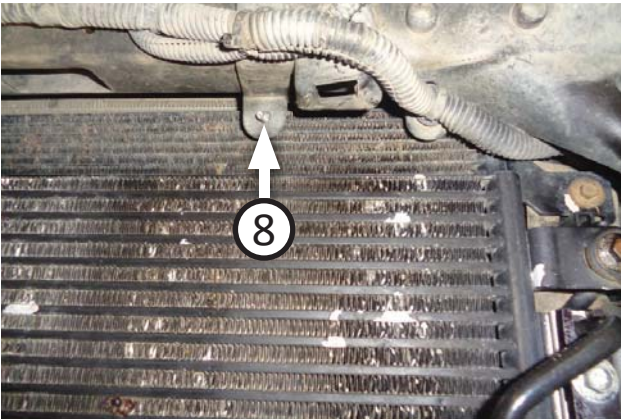


4. Pull straight out along bottom of grill cover to unclip it, then remove it completely from vehicle. Retain for later use.

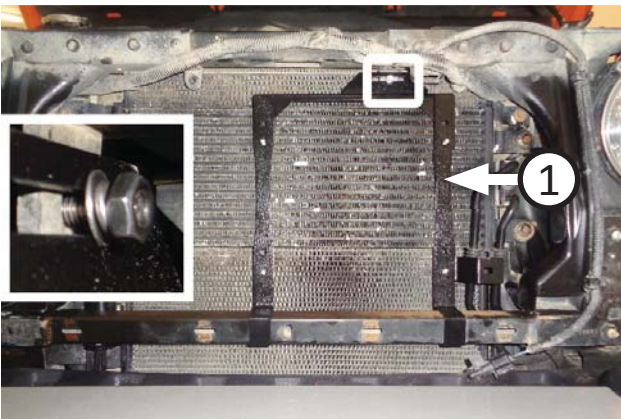


- Remove push pin and unplug IAT sensor from core support.

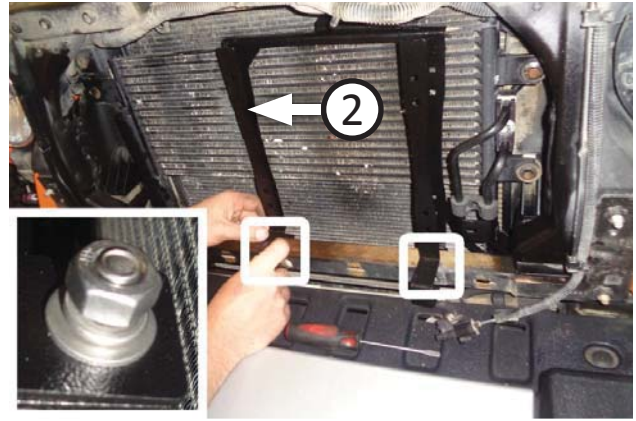
INSTALL YOUR B&M TRANSMISSION COOLER:



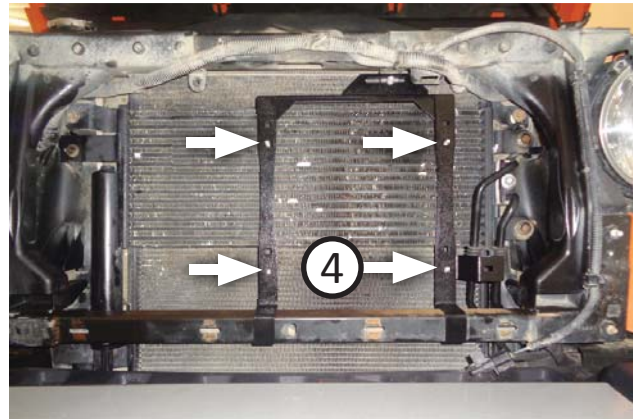
- Place **10-32 x 1/2" screw (8)** facing outward to hold frame to top driver corner of grill.



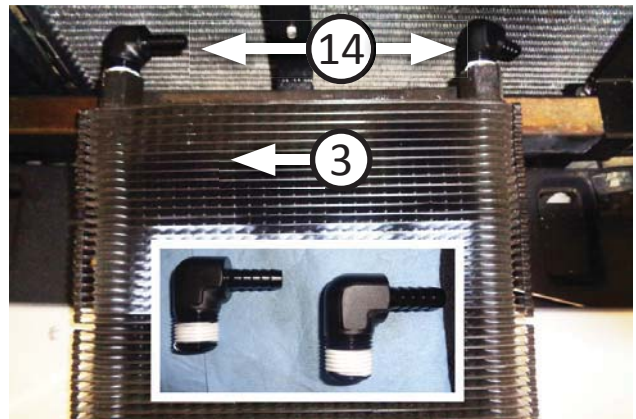
- Attach **rear mounting bracket (1)** to core support using the following fastener assemblies: screw, **10-32 flat washer (9)**, **10-32 lock washer (10)** then **10-32 nut (11)**. Hand-tighten just enough to allow for later alignment.



- Attach **front mounting bracket (2)** to rear bracket using the following fastener assemblies (2 ea.): **1/4-20 x 3/8" carriage bolt (4)**, **1/4" flat washer (5)**, **1/4" split lock washer (6)** and **1/4-20" nut (7)**. Hand-tighten to allow for later alignment.



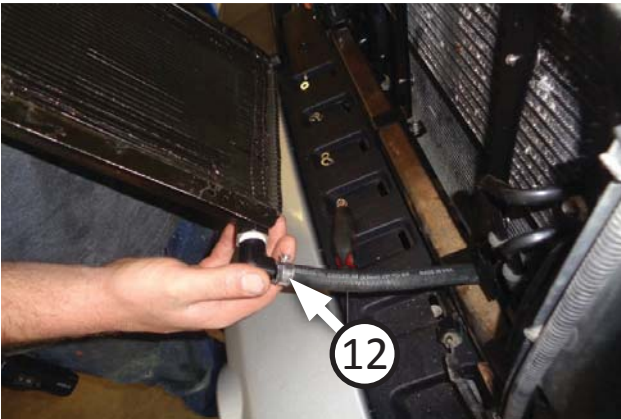
- Place **carriage bolts (x4) (4)** facing outward to hold frames together.



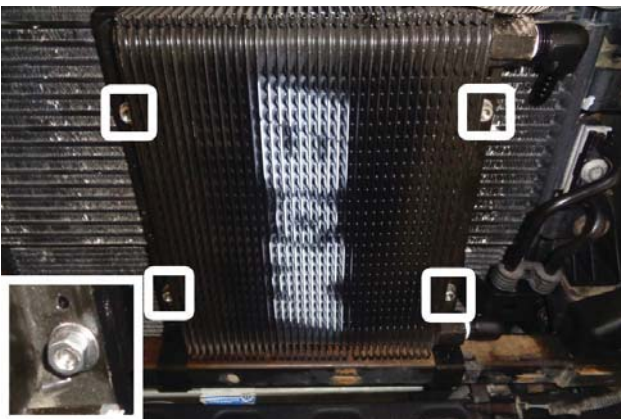
- Apply teflon tape to **1/2 NPT x 3/8" 90° barb (x2) (14)** threads then install them on **11 x 8 x 1 1/2" super cooler (3)** as shown.



11. Route $\frac{3}{8}$ " transmission oil cooler hose (15) through driver side corner of grill frame from underside of vehicle.



12. Place 17MM cross bolt hose clamp (12) onto cooler hose, then install cooler hose onto 90° barb on lower side of super cooler. Move and fasten hose clamp over hose and barb connection.



13. Secure super cooler to frames using (x4 ea.) bolt (4), $\frac{1}{4}$ " flat washer (5), $\frac{1}{4}$ " split lock washer (6) and $\frac{1}{4}$ -20" nut (7). Hand-tighten to allow for later adjustment.

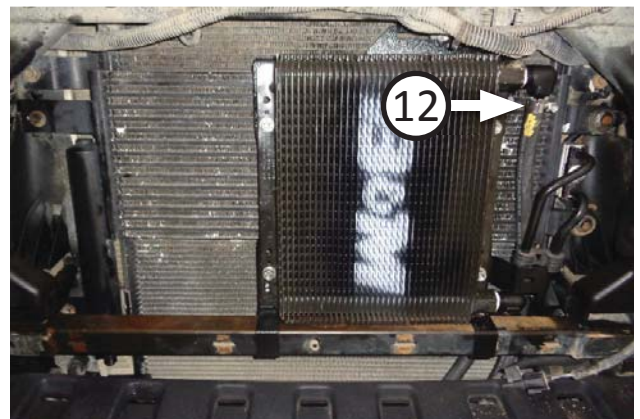


14. Identify and mark factory transmission return line.

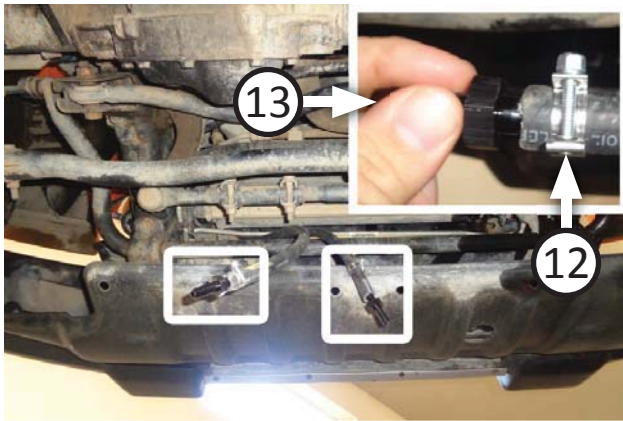
NOTE: Identify return hose line by referring to factory transmission diagrams. Alternatively; run vehicle 20-40 seconds then gauge temperature on both transmission hoses. The return line will have a lower temperature.



15. Trim cooler hose long enough to splice into return hose line. Mark both ends of remaining line then route it back through to super cooler.



16. Place hose clamp (12) onto marked hose, then connect marked hose onto 90° barb upper side super cooler. Move and fasten hose clamp over hose and barb connection.



17. Place hose clamps (x2) (12) onto cooler hoses then insert 3/8 x 3/8" straight barbs (x2) (13). Move and fasten hose clamps over connections.

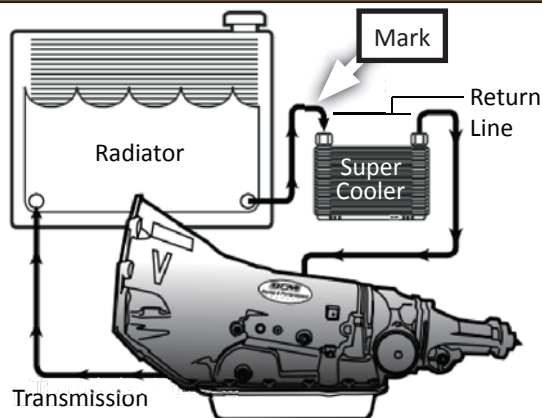


NOTE: When routing hose, avoid contact with other rotating or heated engine components.

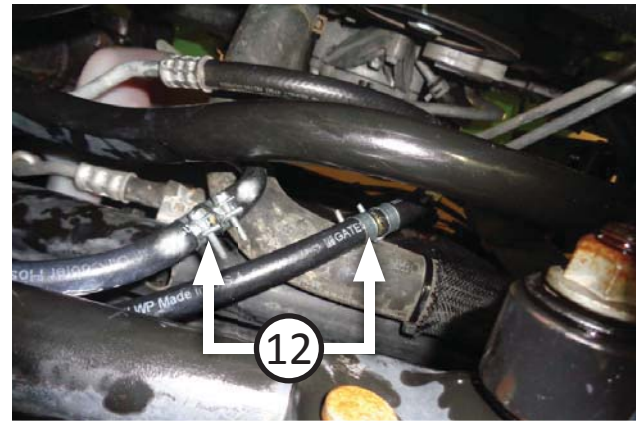
18. Isolate trim location on return line with vice grips. Route cooler hoses over to return line.

ATTENTION:

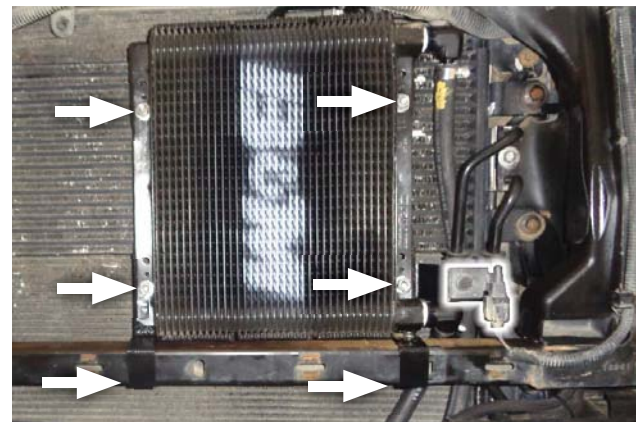
Read to understand next two steps fully in conjunction so they can be completed efficiently to prevent excessive transmission fluid loss.



19. Cut factory return line at isolated trim location, then mark the half coming from radiator.

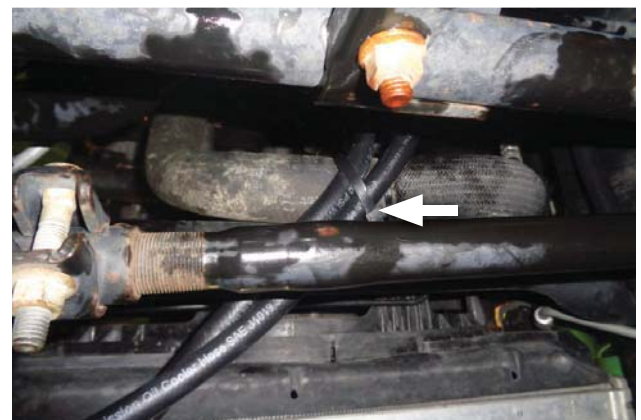


20. Place hose clamps (x2) (12) on both return lines. Connect marked return line to marked cooler hose, then connect remaining lines (x2) together. Move and fasten hose clamps over hose and barb connections.



NOTE: If you are installing B&M Power Steering Cooler, align super cooler close to driver side of grill.

21. Tighten all fasteners securing super cooler to vehicle. Re-install push pin and connect plug (removed step 7) to rear mounting bracket.



22. Correct any kinks or sharp bends in hoses then secure them with 12" cable ties as necessary.



23. Fill your transmission fluid according to vehicle manufacturers procedure, which may be available through vehicle owners manual, dealers service department or website.



24. Place grill cover (removed step 4) back in place then push along lower section to clip it into position. Re-install push pins (x6) (removed step 3) along top of grill cover.



25. Plug front reflector lights (x2) (unplugged step 2) back in.



Congratulations, the installation of your B&M Automatic Transmission Cooler is now complete!

MONITORING TRANSMISSION:

To accurately monitor your jeep transmission fluid level, it is important to always follow the same procedure when checking it:

- Check transmission fluid level at operating temperature. If necessary, drive vehicle for 10-15 minutes to bring transmission up to temperature.
- Park on level ground. With vehicle running at idle, slowly move gear shift level from PARK down through entire gear range, then back to PARK again, stopping for a few seconds at each gear position. With transmission in PARK, leave vehicle running at idle.
- Remove dipstick, wipe it off and reinstall it. Then remove dipstick again to check fluid level.

NOTE: B&M Racing maintain a highly trained technical service department to answer your technical questions, provide additional product information and offer various recommendations.

Technical Service: (707) 544-4761
Monday – Friday: 7:30 am to 5:00 pm Pacific Time
(Closed Saturday and Sunday)

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