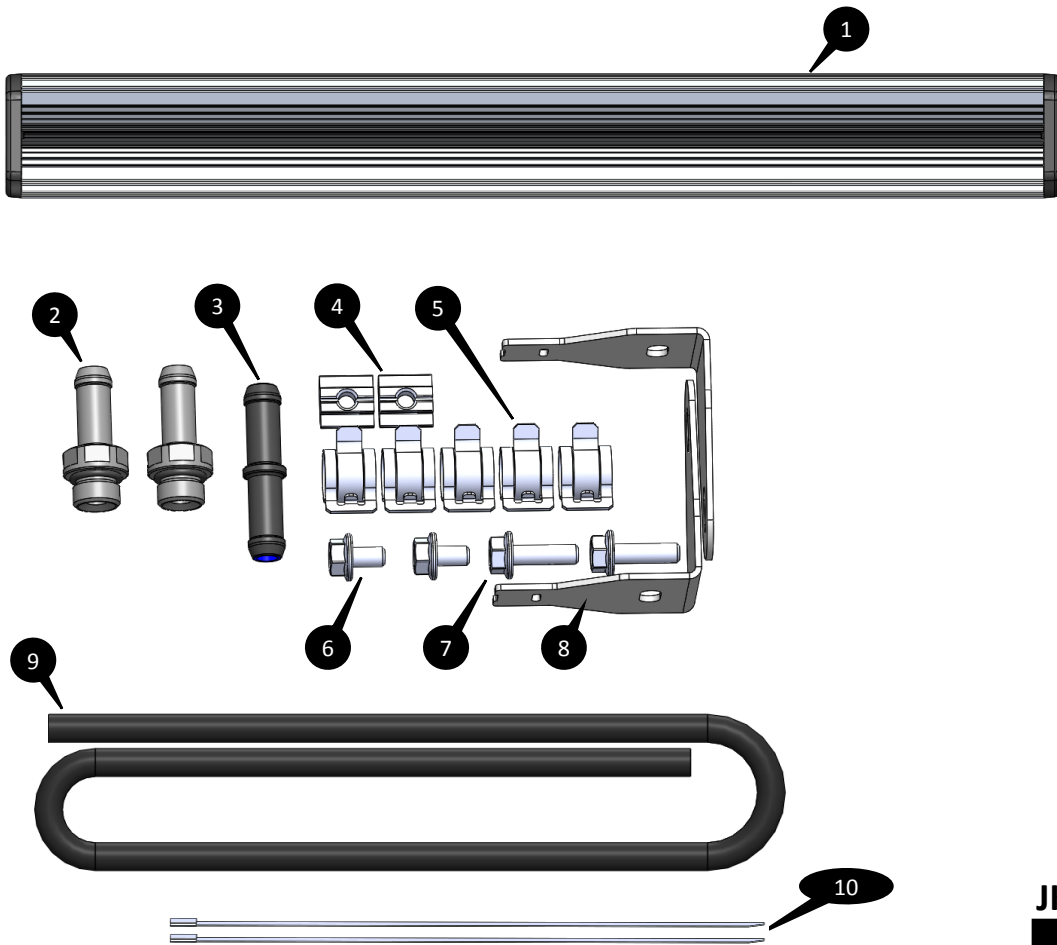


JL AND JT ALL MODELS

POWER STEERING COOLER INSTRUCTIONS



Item #	Part No.	Description	QTY
1	X01-01-002	Assembly / Sub, Cooler, Caps to Body	1
2	X01-02-001	ASSEMBLY/SUB,GENERAL FITTING, O-RING SAE-6 BOSS	2
3	U04-01-001-2	HARDWARE/ HOSE, UNION, 3/8" NIPPLE, TYPE 2 BLACK ANO	1
4	F01-01-001	FASTNER/T-SLOT, SLIDE-IN/8MM SLOT, M6 X 1 THREAD	1
5	U04-02-062-1	HARDWARE/HOSE, CONSTANT TENSION CLAMP, .625 HOSE SIZE, ZINC ALUMINUM 700 HR SALT SPRAY	5
6	F03-06-010-2	FASTENER/FLANGE H, 6MM X 1 COARSE THR., TLG 10MM, 304 STAINLESS	2
7	F03-06-020-2	FASTENER/FLANGE H, 6MM X 1 COARSE THR., TLG 20MM, 304 STAINLESS	2
8	A01-03-003-1	COOLING/POWER STEERING, MOUNT JK/JL, 2.424" TLG, STAINLESS	2
9	U04-03-050-3	HARDWARE/HOSE,POWER STEERING J189, 60" LENGTH, .375" HOSE ID	1
10	U10-02-008-1	HARDWARE/RETENTION, ZIP TIE STRAP, 8.00" SS 304	2

Please read instructions before beginning installation. Check the kit hardware against the parts list. Be sure you have all needed parts and know where they go.

WARNING!!

APEX DESIGNS recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassembly/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle. Please read instructions before beginning installation. Check the kit hardware against the parts list. Be sure you have all needed parts and know where they go.

FURTHER INFORMATION
JK MOUNTING AND OTHER

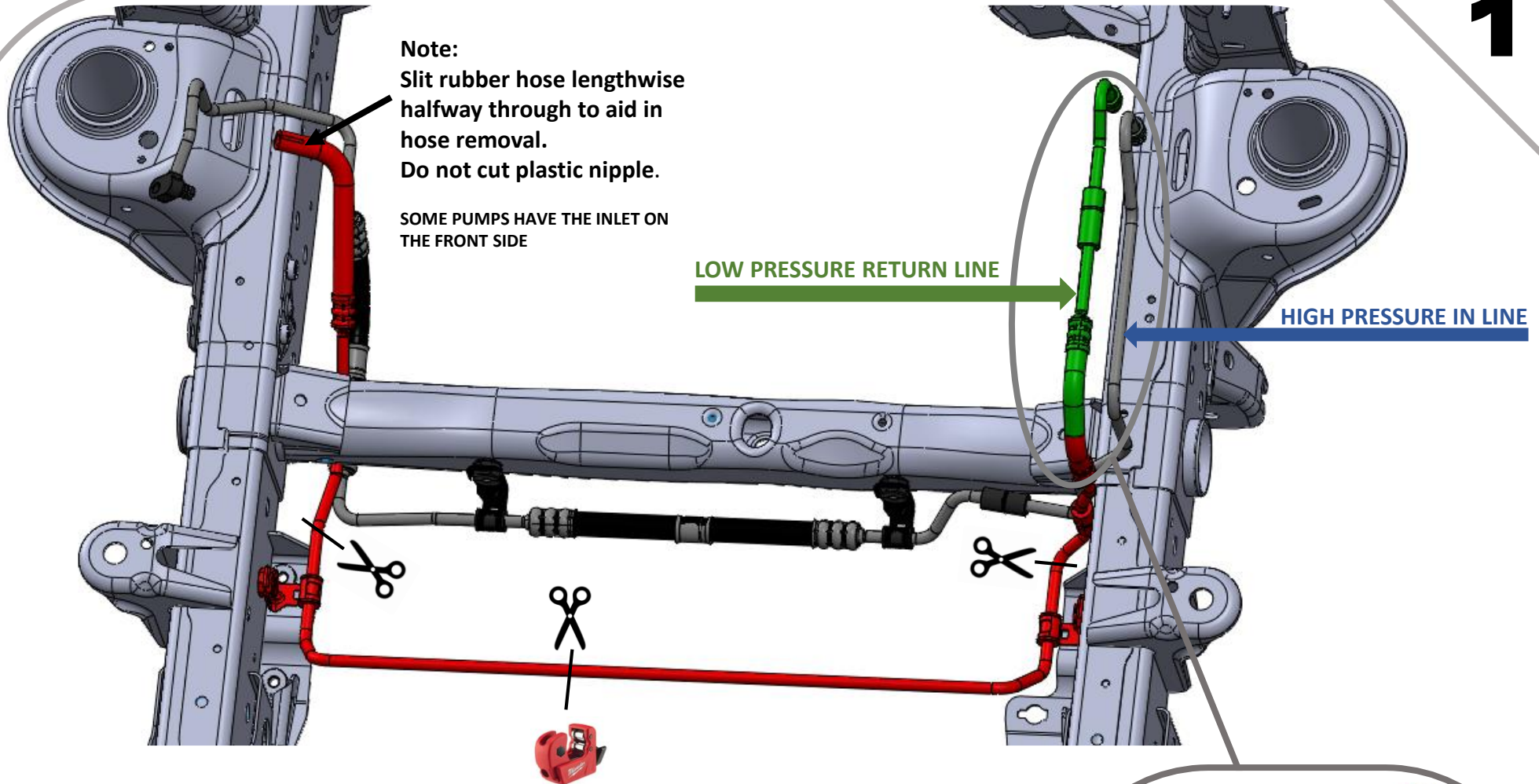




JL AND JT

Low pressure hose return line cut and trim

1

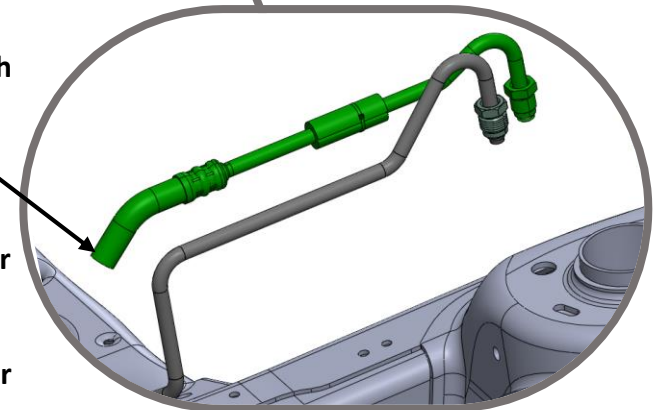


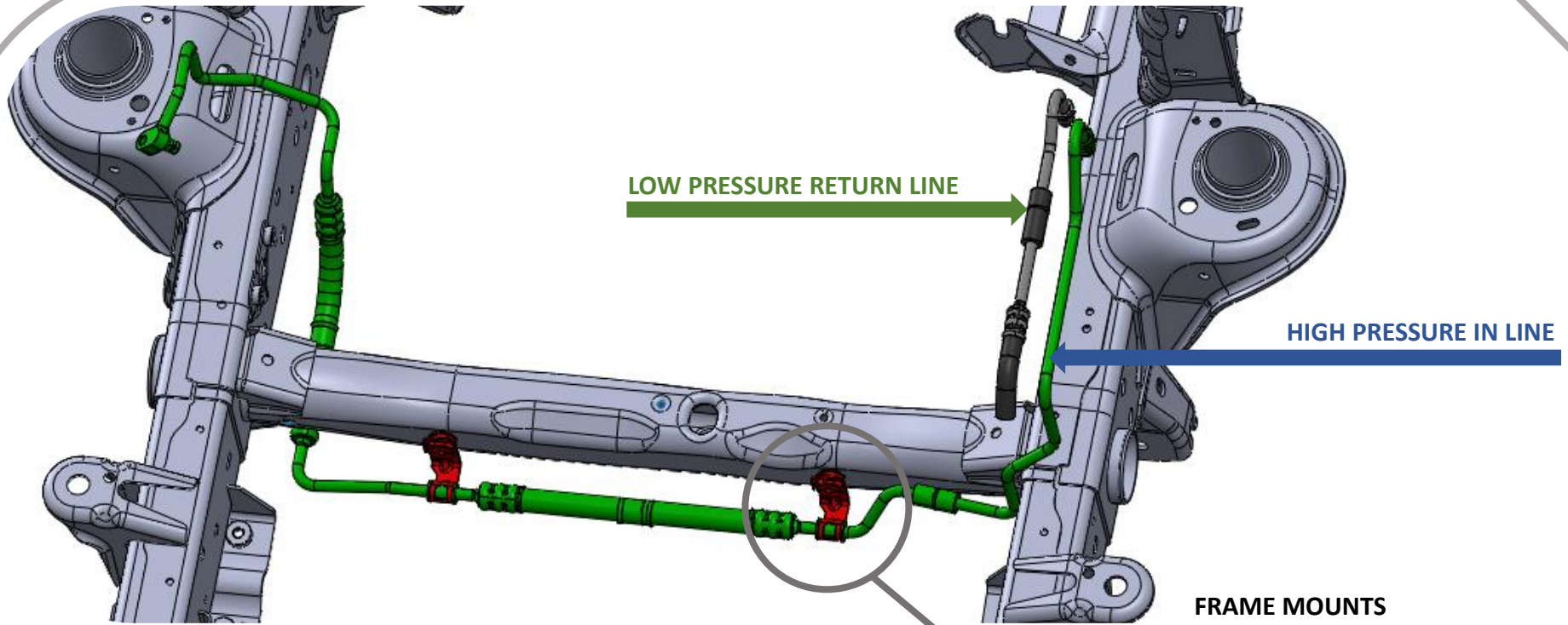
Step 1 low pressure line

- Remove cap from power steering reservoir.
- Using a small tubing cutter cut the low-pressure line as shown.
- Place bucket directly under cut to catch oil. Wait until flow stops.
- Cut low pressure hard line as shown to aid in line removal.
- A portion of the low-pressure line will be used shown in green.
- Remove and discard all red components.

Cut rubber hose here with razor blade as shown leaving a 1.0" straight section.

Access through left fender well. Remove metal aftermarket inner fender or flex plastic inner fender out the way.



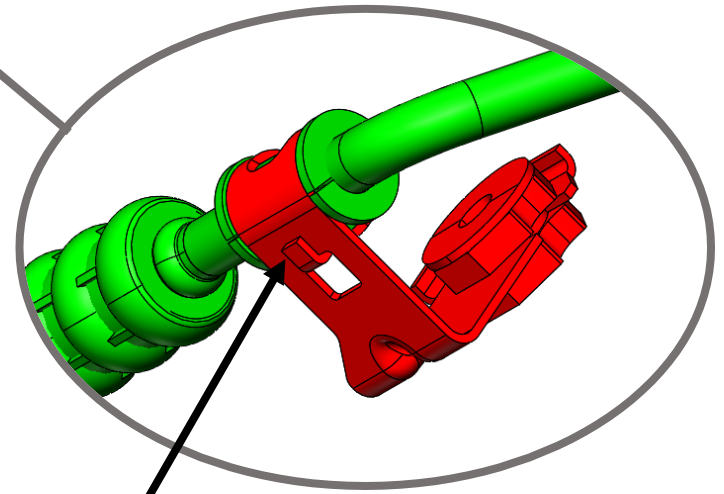
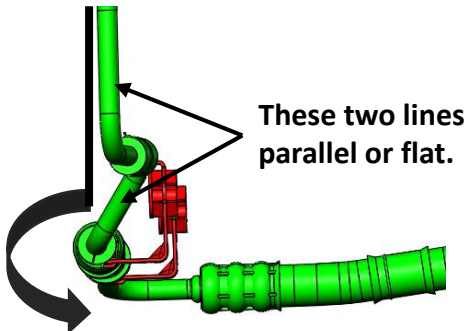


Step 2 high pressure line

- a) Remove frame mounts from frame with 10mm wrench **in red**. Then remove the tabs by prying the steel tab free with a screwdriver. Leave rubber sleeve that surrounds steel tube. Discard the 2 tabs **in red**.
- b) Use zip tie or other method to hold the high-pressure line down and away from the location of the cooler mounting location. This will aid in placement of cooler.

Optional:

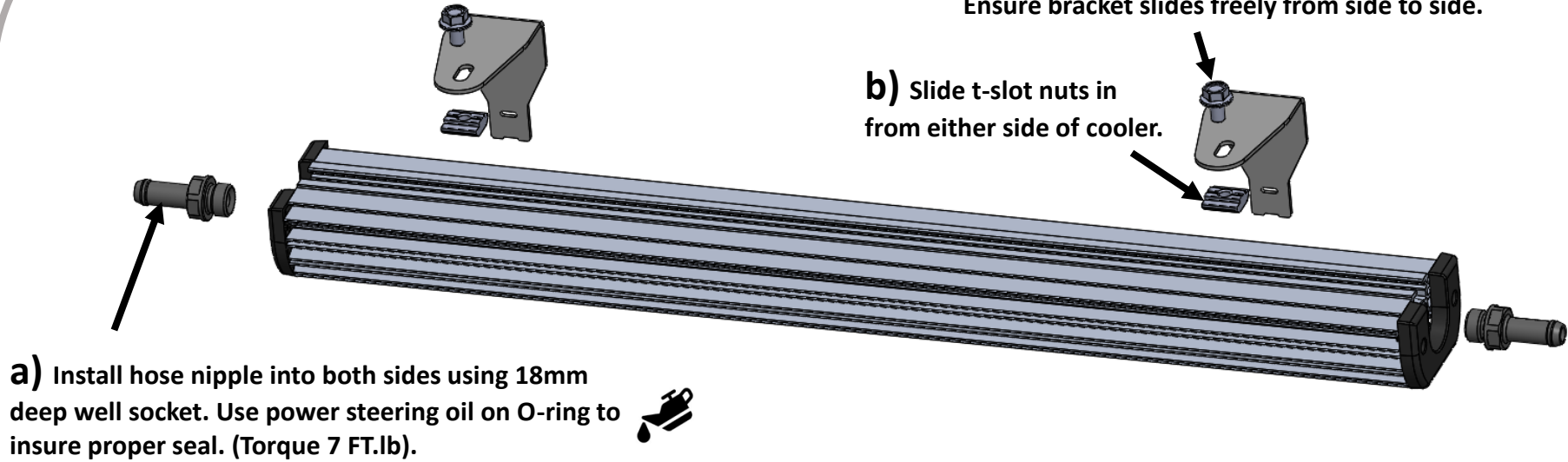
Bending the tube until flat or close to flat will make a nicer install.



Pry here to release steel tab from tube.

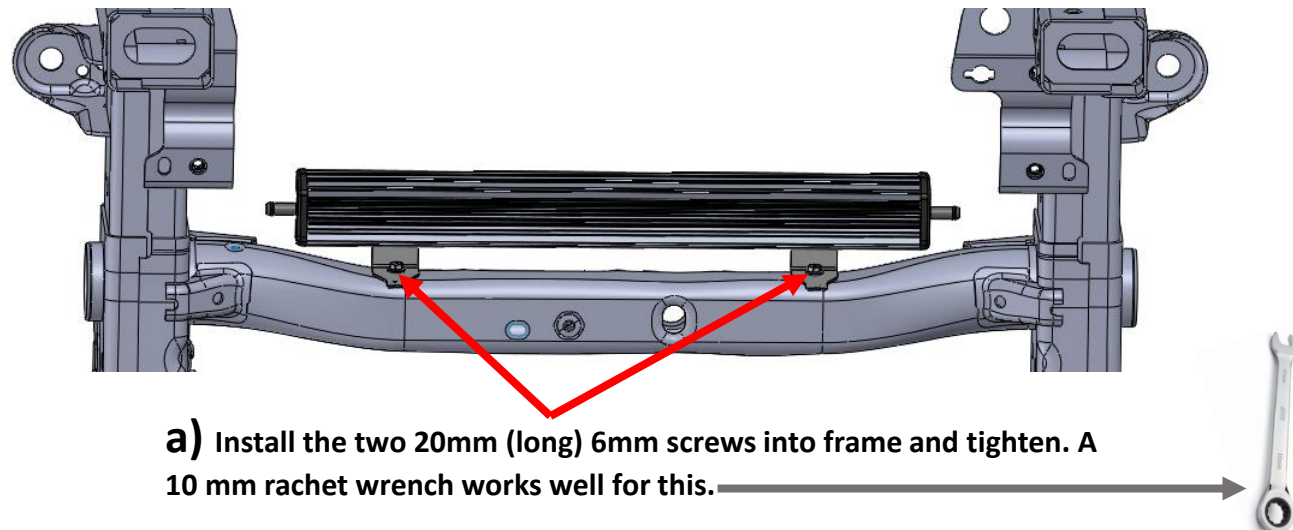


Step 3 Cooler Assembly



Step 4 Cooler mounting

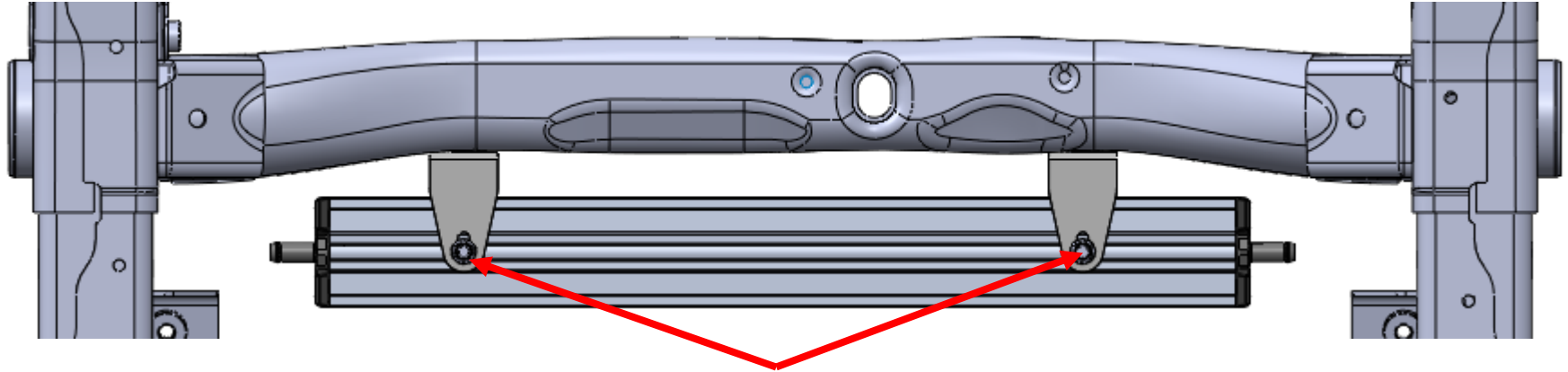
As seen from below





Step 5 Cooler Assembly

As seen from above

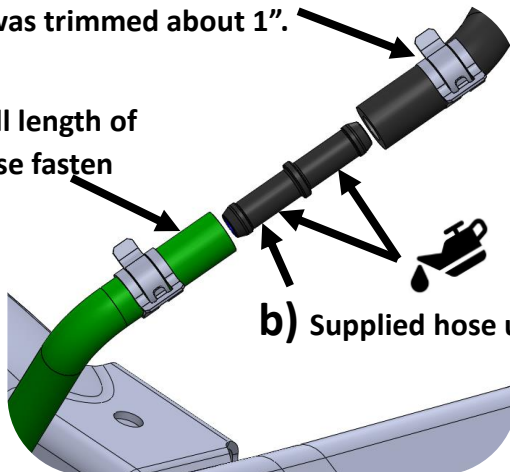


Slide cooler towards the front of the jeep. Tighten the two 6mm screws into the cooler. A 10 mm ratchet wrench works well for this. You may need to pull downwards on the cooler to give room for the wrench to fit on the 10mm hex of the screw and the radiator.

Step 6 Hose Routing driver's side

a) Using pliers or vise grips squeeze and slide supplied clamp over factory hose that was trimmed about 1".

c) Using full length of supplied hose fasten as shown.



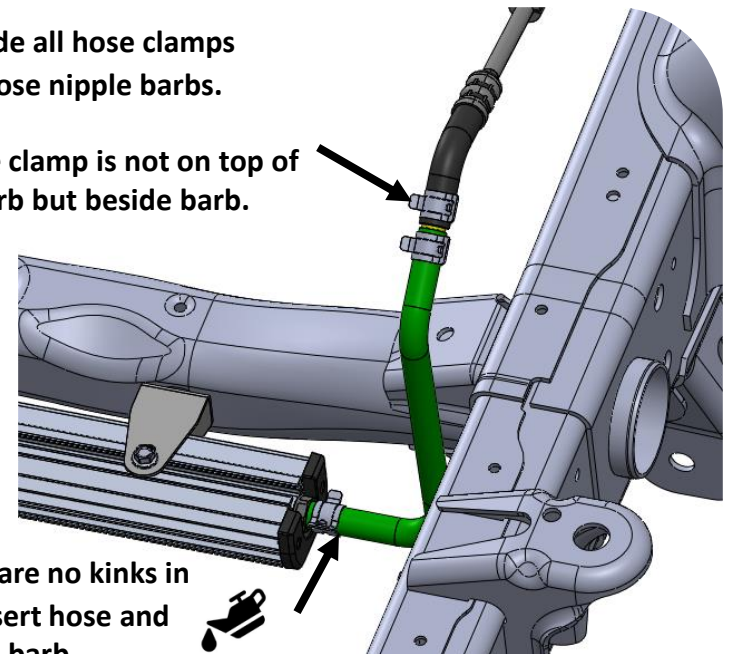
b) Supplied hose union.

Apply power steering oil on barbs.

d) Trim hose to fit. Ensure there are no kinks in the hose, and there is no bind. Insert hose and slide hose clamp over hose nipple barb.

e) Slide all hose clamps over hose nipple barbs.

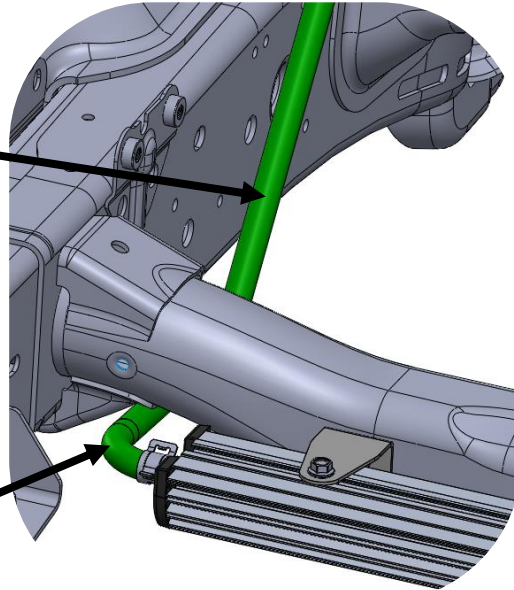
Ensure clamp is not on top of the barb but beside barb.





Step 7 Hose Routing passenger's side hose

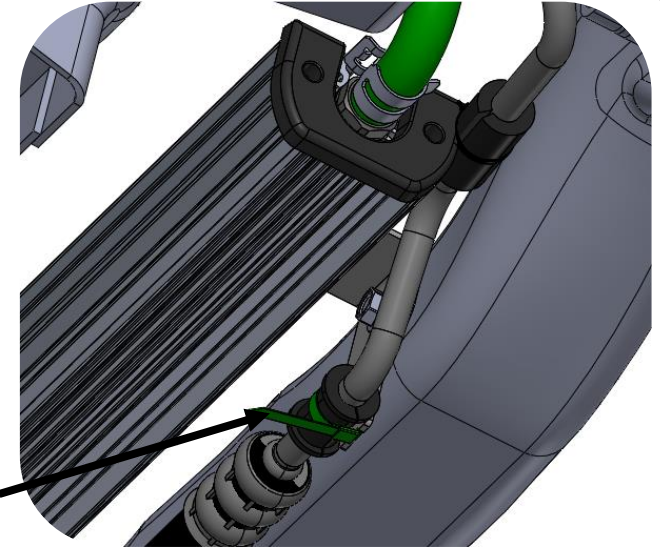
b) Run hose up to power steering pump reservoir nipple. Cut hose as needed to ensure proper routing. Hose should have no kinks and be routed away from harm. Use remaining supplied hose clamp.



a) Use remaining supplied hose/clamp and fasten as shown.



Use supplied metal strap to secure high pressure hose to brackets, both sides. Trim excess strap.



Step 8 OIL FILL

One quart or a 1L container is more than enough to complete the job. If using an empty steering gear another quart will be needed.

This system **MUST** use high grade pure synthetic. **Do not use ATF.**

Why the good stuff?

High grade synthetics offer a much higher temperature capacity without breaking down. Even more important is that it will maintain a more consistent viscosity at low temperatures so the steering will not become heavy and blow off the pressure relief valve to soon. This could cause a large reduction in power assist at very low temperature conditions (sub 10 degrees F)

Fill with synthetic power steering fluid or OE specified fluid. Bleed as per standard method specified by MOPAR

Note: For JL and JT there is an electric pump. This pump will not operate until the steering is moved. Cycle back and forth so that pump will accept fluid. It is best to have the vehicle on the ground



Part # MOPAR 68088485AB



Part # PENTOSIN CHF 11S



Part # REDLINE 30404



OTHER OILS MAY BE USED IF THEY MEET CHRYSLER MINIMUM SPEC. MA-11655

Torque values

- 1. M6 X 1.0 5 FT LBS
- 3. HOSE NIPPLE 7 FT LBS

Care and service:

The finish is highly resistant to salt and most chemicals. Strong acids should be avoided such as mag wheel cleaner.
The cooler is compatible with all fluids that may be typically used including oil, coolants and fuels

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INSTRUCTIONS

**If you can read this
flip me over**