N73 Coolant Pipe

Part #: AGA-N73-6061

Problem:

Rubber seal on aluminum cooling tube has failed. Coolant is leaking into back area of engine timing cover and out of hole.

Solution:

Install an AGA collapsible cooling tube. We have designed a tube and seals that can be installed (by experienced tech) in under 10 hours.

Benefit:

A potential $11,000 - $13,000 repair job is now achieved for less than $3,000. Additionally, the repair can be completed same-day compared to 2-3 weeks.

Parts Included:

1	N73 Coolant Pipe
1	Grease Applicator
1	Bag of Grease
1	Wire Brush

Additional Parts Needed to Complete the Repair:

1	11-53-1-710-048	Eng. Block Rear O-ring
1	11-51-7-507-717	Heat Pipe/WP O-ring
1	11-51-7-508-535	Water Pump Gasket
1	11-51-1-439-976	Pipe Pump/Valley Pan
1	11-14-7-506-384	Valley Pan W/Gasket
2	11-61-7-568-910	Intake Manifold Gasket
12	13-64-7-516-741	Injector O-ring
1	12-31-1-439-988	Alternator Feed Pipe
1	11-53-1-710-048	Engine Block Rear O-ring
1	AGA-N73-6061-T	N73/760 Install Tool

Before the N73 Coolant Pipe, we recommend watching our YouTube video located on our website at www.agatools.com

1. Remove:
    - Drain engine block for coolant
    - Intake manifold (BMW TIS operation 11-61-050)
    - Leave injectors in head
    - Valley pan/cover
    - Vibration dampener (BMW TIS operation 11-23-010)
    - Water pump (BMW TIS operation 11-51-000)

2. Cut cooling tube and remove rear part by hand. (Picture from 745 but same procedure on 760)

3. Drill a hole in the front part of tube. (Picture from 745 but same procedure on 760)

4. Pull tube out with lever bar.

5. Remove old seal with pick tool. Clean seal groove (completely clean is a MUST, use a small wire brush to remove ALL debris from old seal, inspect

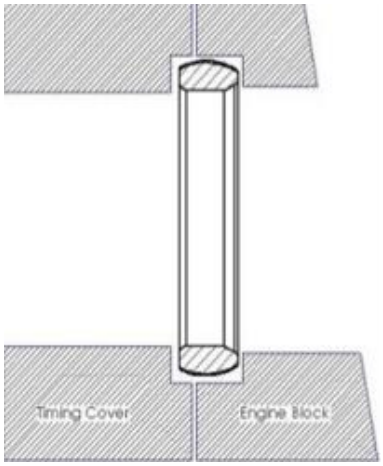
with mirror. Picture from 745 but same procedure on 760).

6. **Replacing Rear O-ring**
[Part # 11-53-1-710-048]

Remove rear o-ring in back of engine block. Clean groove and install new o-ring (Part #11-53-1-710-048). Apply a little of the supplied grease to o-ring in the rear of block.

7. **Installing Front Seal**
[Part # AGA-N73-V-SEAL]
(Seal placed on tube for shipping purposes)

Install engine block front seal. Flat end of the seal should be facing towards the front of the car when installed in engine block.

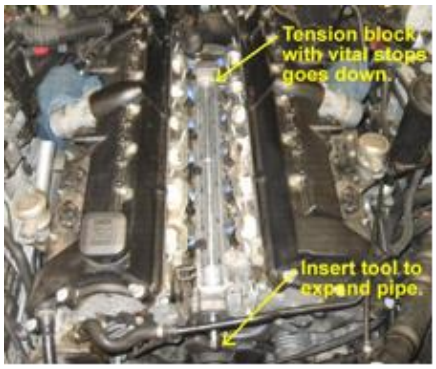


Apply white grease (supplied in the kit) to new

seal; fold seal and insert into hole (see drawing on the right for directions). Work seal into groove by hand. Seal must be completely seated before installing tube. If necessary, push seal in place with a blunt tool (blue nylon tool supplied). Take extreme care not to damage seal when installing.

8. **Installing Cooling Tube**
   [Part # AGA-N73-6061]

   Start with the tube collapsed. Lube tube on both ends with white grease (supplied in kit). Hold tube into engine block. Insert tube into rear of engine block. Tension block with viton stops down. Turn tube with special tool (AGA-N73-TOOL) so it expands, as front of the tube enters seal. Observe front seal with mirror from water pump side as the tube goes into seal. Seal CANNOT be pinched. If seal pushes out, collapse tube a bit, turn tube (without expanding) from side to side and then continue expanding until seal can no longer be seen from water pump side.



9. Tighten tube by hand until it has tension on front and on the rear o-ring. NOTE: the back at the block is cast and will vary from car to car. It is normal for o-ring to contact more on top or bottom.

   Do not over tighten!

   Install all parts to seal cooling system.
   Pressure test system to 15 PSI for minimum of 3 hours.
   Observe for leaks in system and no leaks from the hole in the front timing cover.