

INSTALLATION INSTRUCTIONS

sūsa Thermostatic LS Oil Cooler Adapter Part # 18-TOTLS-22

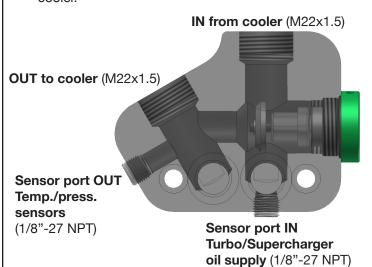
Please read these instructions completely before beginning installation.

CONTENTS		
QTY.	DESCRIPTION	
1	Oil cooler adapter body	
1	Thermostatic oil control valve (preinstalled)	
2	1/8"-27 NPT pipe port plug	
2	O-ring	
2	Screw: M6x1.0 x 40 mm	

General Information & Operation Summary

This oil cooler adapter is designed to allow plumbing of an external oil cooler on GM Gen III/IV LS applications. It features ProLine M22x1.5 adapter fitting ports, a built-in thermostatic oil valve, and includes two 1/8"-27 NPT ports for sending unit installation or use as access port for oil feed to turbocharger/supercharger.

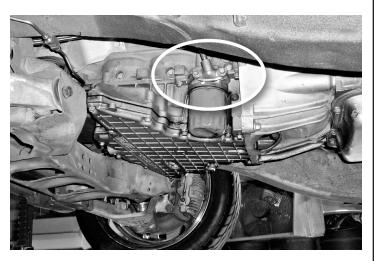
- The naturally-open by-pass will allow oil to by-pass the oil cooler until the thermostatic oil valve actuates to smoothly close the by-pass hole at circa 180°F.
- The temperature reading at the Sensor port OUT location will be the pre-oil cooler temperature.
- The oil cooler adapter is after the factory pan-mounted oil filter in the production oil circuit, so oil going out to the oil cooler is filtered oil.
- Only use this adapter to route oil to an external oil cooler.





IMPORTANT

- M22x1.5 ProLine ports require adapter fitting with captured O-ring for proper sealing.
- 1/8"-27 NPT tapered ports require thread sealant compound on male fitting for proper sealing.



Part 1: Vehicle preparation

- 1. Locate the oil port cover above the oil filter.
- 2. Remove the two screws to remove the oil port cover and gasket. Clean the mounting surface area.

Part 2: NPT plug and/or sending unit installation

NOTE: The port plugs provided are loosely inserted into the ports to prevent loss during shipment and are NOT sealed. Installer will determine the use for the ports and either fully install the port plugs provided or

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install an appropriate sending unit into the ports during installation.

- The Sensor port OUT is best suited for the installation of temperature and pressure sensors.
- The Sensor port IN is best suited for oil supply to turbochargers and superchargers.



Sensor port IN Turbo/Supercharger oil supply

- 3. Remove the 1/8"-27 NPT port plugs.
- 4. Apply thread sealant to male pipe threads if not pre-applied. If PTFE tape is used it should be wrapped 1-1/2 to 2 turns in clockwise direction when viewed from the pipe thread end.

CAUTION: More than two turns of tape may cause distortion or cracking of the port.

- 5. Screw the plug or sending unit into the port to the finger tight position.
- 6. Wrench tighten the plug or sending unit to 2-3 turnsfrom-finger-tight (T.F.F.T.).

Part 3: Oil cooler adapter installation

 Lubricate the adapter fitting O-rings and install the adapter fittings into the oil cooler adapter body.
TIP: Install the oil lines onto the oil cooler adapter

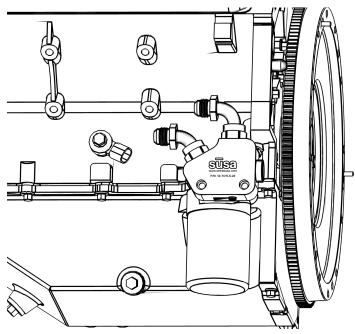
before installing the oil cooler adapter onto the motor.

8. Lightly coat the included O-rings with oil and insert O-rings into the O-ring channels in the sealing face of the oil cooler adapter.

TIP: A light coat of oil on the O-rings will help retain them in O-ring channels during next step.



- 9. Place the oil cooler adapter over oil port on motor.
- 10. Fasten with included M6x1.0 screws and tighten to 106 in.-lb. (12 Nm).
- 11. Ensure adequate clearance of oil cooler adapter, adapter fittings or hose ends, and any installed sending unit around any moving parts, exhaust systems, or sharp edges that could cause component failure or interference.
- 12. Oil cooler adapter is now ready for installation of external oil cooler. Please refer to installation instructions or reference material provided with oil cooler.



Shown above with P/N: 222-M22AN10-6090 direct-port adapter kit

ACCESSORY PARTS AVAILABLE

sūsa ProLine Direct-port Adapter System includes M22-AN Adapters & Hose Ends in -6, -8, -10, -12, available in orientations 00° straight, 45°, 90°

View the entire product range at: www.setrabusa.com

Description	Part Number
Replacement O-rings for Mounting 18-TOTLS-22 (sold in pair)	20-568113-N-2
sūsa direct-port adapter kit, M22-AN10, 60° & 90°	222-M22AN10-6090
Service Kit Replacement Thermostatic Oil Valve	SK-TOV180-22

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