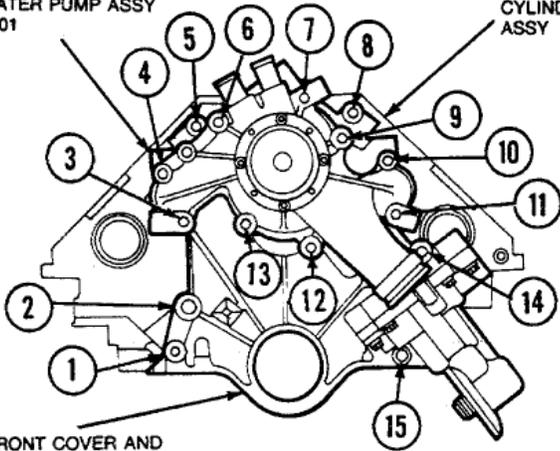


# 1993 Mercury Sable Wagon Water Pump Replacement

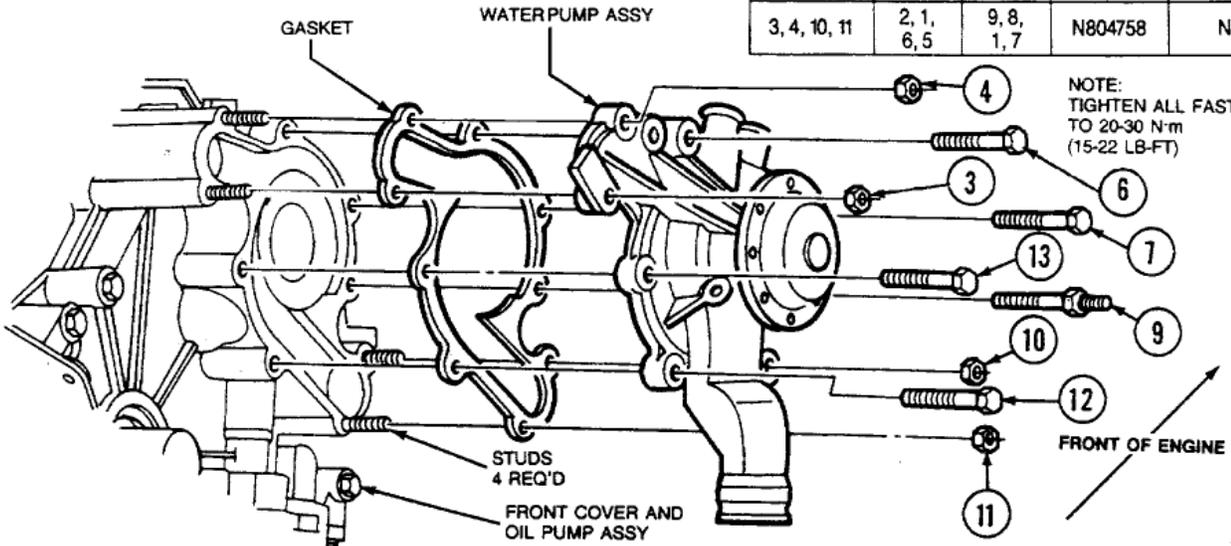
WATER PUMP ASSY  
8501

CYLINDER BLOCK  
ASSY



FRONT COVER AND  
OIL PUMP ASSY  
6F008

FASTENER AND HOLE NO.	HOLE NO.		FASTENERS	
	WATER PUMP	FRONT COVER	PART NO.	PART NAME
1.		4	N805112	STUD
2.		2	N805112	STUD
3.	2	9	N804757	STUD
4.	1	8	N804757	STUD
5.		10	N605787	BOLT
6.	9	15	N605908	BOLT
7.	8	16	N605908	BOLT
8.		11	N605787	BOLT
9.	7	17	N804756	BOLT
10.	6	1	N805275	STUD
11.	5	7	N804757	STUD
12.	4	13	N605908	BOLT
13.	3	14	N605908	BOLT
14.		6	N804839	BOLT
15.		5	N804841	CAP SCREW
3, 4, 10, 11	2, 1, 6, 5	9, 8, 1, 7	N804758	NUT



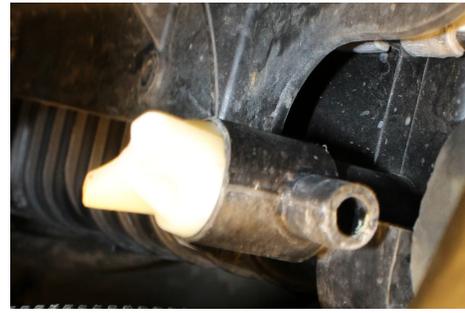
NOTE:  
TIGHTEN ALL FASTENERS  
TO 20-30 N·m  
(15-22 LB-FT)

A11388-C

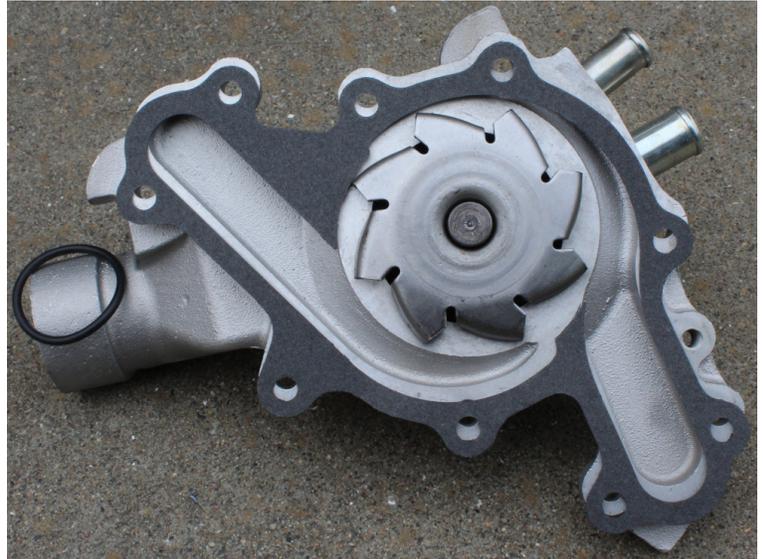
Inside of Water Pump



Draining Engine Coolant



Coolant Drain Plug



New Water Pump

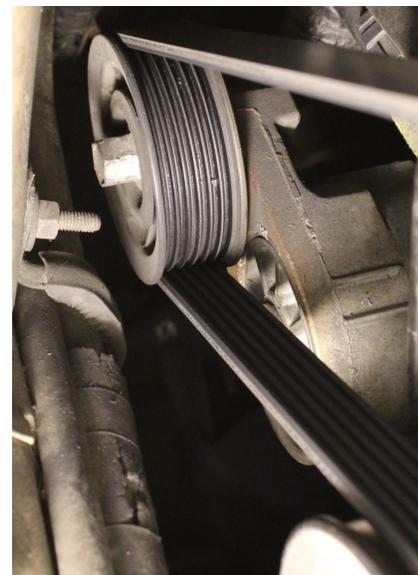
Engine coolant splashed out a lot from water pump when the pressure was asserted.

The engine coolant must be drained first by opening drain plug under radiator.

New water pump is sold along with O-ring and gasket. When installed, sufficient amount of RTV (Room Temperature Vulcanizing) silicone adhesive/sealant must be applied not to get undesirable leaking.



Old Water Pump Installed



Drive Belt Tensioner (Tension Idler)



Drive Belt Released & Pulley Removed



Nut of Water Pump Metal Inlet Tube Removed



Long Nut-bar Removal Problem (Vehicle Design Flaw)

Passenger's side engine room panel made by metal prevented removing a long nut-bar.

To remove the long nut-bar, a hole was made on the metal panel by using special drill bits (Reamer).



Special Drill Bits (Reamer) Made a Hole



Old Water Pump with Inlet Tube Removed



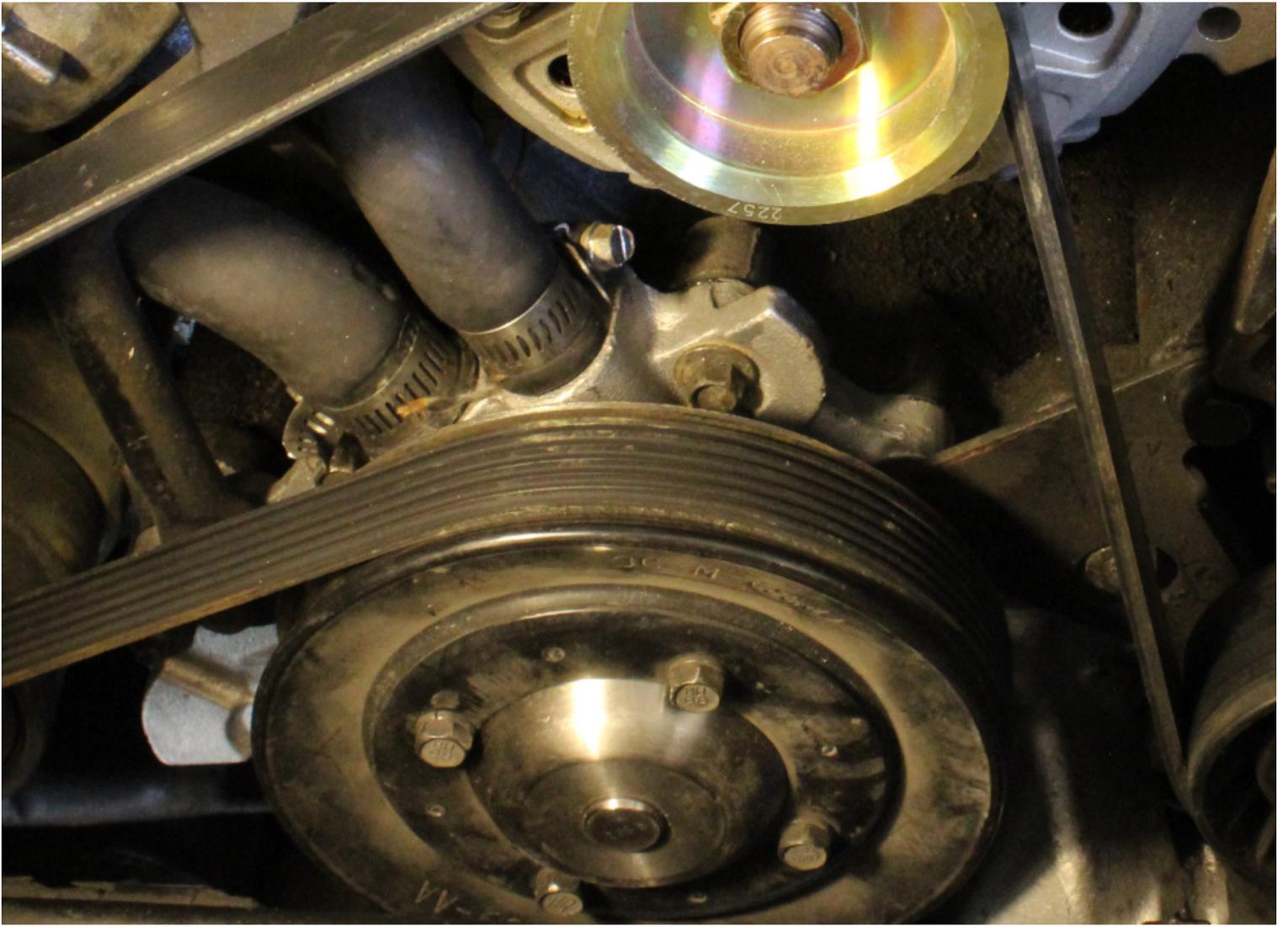
Old Water Pump & Inlet Tube Removed

There is no replaceable water pump inlet tube at market.

Sole resolution was to detach the old water pump inlet tube and connected it to new water pump.

The inlet tube was cut out from old water pump using angle grinder with metal cut-off wheel as well as metal-cut hand saw for more sensitive cut that needed accuracy.

Vertical black material (center; three portions) is old decayed O-ring. O-ring & sufficient amount of RTV silicone must be applied to seal new water pump and inlet tube perfectly.



Replaced