

INSTALLING YOUR NEW WATER PUMP,

please follow all instructions furnished with the pump. *Failure to follow instructions can void your warranty.*

Handle your new water pump with care. Never strike its shaft. This will damage its bearing. Always inspect the fan clutch, fan, belts and pulley when installing a new water pump. Before working on an engine, disconnect the battery ground cable. (Refer to the owner's manual and O.E.M. instructions for restarting after reconnecting it.)

CHECK EVERYTHING WHILE INSTALLING YOUR NEW WATER PUMP TO HELP AVOID FUTURE

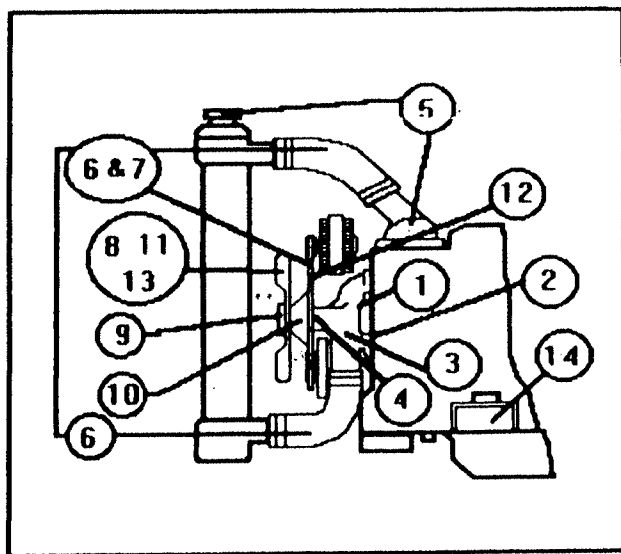
NOTE: The following can cause a water pump failure: Dirty or corrosive coolant or systems; defective, bent or unbalanced fan; defective or unbalanced clutch; wrong belt tension; fan shroud or radiator interference; loose or broken motor mounts; striking the bearing shaft on its end.

Use a 50/50 mixture of new antifreeze and distilled water or its equivalent. (High mineral content, acid or alkaline water reduces pump life, voiding its warranty.) Increase the amount of antifreeze only if needed for your winters. A 50/50 ratio using low silicate antifreeze is best for optimum cooling and prolonged pump life.

FOR YOUR PROTECTION, NEVER STAND IN LINE WITH THE FAN WHEN RUNNING THE ENGINE.

INSTALLATION INSTRUCTIONS:

Follow this sequence:



1. Always thoroughly clean the entire cooling system, engine cavity and gasket surface. Tighten any backplate bolts, as needed.
2. Position new gaskets on the pump using sealer on both sides.
3. Carefully install the new pump. **DO NOT STRIKE THE SHAFT.** Tighten the bolts using a crisscross pattern.
4. Turn the pump by hand. Be sure it turns freely.
5. Inspect and replace the thermostat or radiator cap if they are sticking or leaking.
6. Inspect and replace any hoses and belts with signs of wear or visible defects. Rubber parts over 4 years old should always be replaced.
7. Reconnect the hoses. Refer to the owner's manual or O.E.M. instructions for any special fill procedures. Fill the cooling system and inspect it for leaks. Always dispose of used coolant according to EPA requirements.

8. Inspect and replace any fan with cracks, bends, loose rivets, etc. **NEVER STRAIGHTEN A BENT FAN.**
9. **INSPECT AND REPLACE ANY FAN CLUTCH WITH EXCESSIVE WOBBLE, LOOSENESS OR LOSS OF OIL. A BAD OR MIS-ALIGNED CLUTCH WILL DAMAGE A WATER PUMP.**
10. Make sure any pulley or clutch sits squarely on the pump hub. Using lockwashers, torque the bolts evenly so all parts turn without wobbling.
11. Rotate the fan by hand to see if it wobbles: Maximum to be 3/32" at the outer edge if no clutch, 1/4" with a clutch.
12. On engines without automatic tensioners, adjust belts to proper tension using a tension gage. Refer to any manufacture's specs. Or adjust the belts for a deflection of 1/2" to 3/4". Inspect and replace any defective automatic tensioner or idler pulley.
(HINT: Automatic tensioners will normally tighten with use.)
13. Check fan blade tip clearances to the radiator and any shroud. Check any electric cooling fan to insure it is functioning properly.
14. Inspect and replace the motor mounts if there are signs of wear or splitting. Tighten any loose bolts.
15. Start the engine and run it until it reaches normal operating temperature. Check for smooth operation. However, **NEVER STAND NEAR OR IN LINE WITH THE FAN WHEN RUNNING AN ENGINE. FOR YOUR OWN PROTECTION, THE HOOD SHOULD BE CLOSED WHEN REVVING THE ENGINE.** Turn the engine off and check for leaks.

THIS PRODUCT IS INTENDED FOR USE ONLY AS ORIGINALLY SPECIFIED BY THE CATALOG AND THE O.E.M. MANUFACTURER.

IF THE HEAT WARNING LIGHT OR TEMPERATURE GAGES INDICATE OVERHEATING, CHECK THE COOLING SYSTEM TO AVOID DAMAGE.

CAUTION: NEVER REMOVE THE RADIATOR CAP WHEN THE SYSTEM IS HOT.

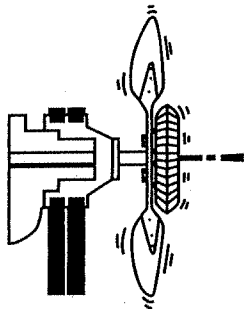
NOT RECOMMENDED FOR AIRCRAFT USE.

INSTALL:

1. Remove fan clutch by loosening four mounting bolts at water pump shaft. Some late model Ford Light Truck fan clutches have threaded shafts – remove by unscrewing fan clutch shaft from water pump shaft.
2. Remove fan blade from fan clutch. At this point inspect fan blade for damage. (See fig. 1) Reinstall fan blade on new fan clutch using new bolts provided. Tighten to 15-20 Ft./Lbs. torque.
3. The illustration shown points out the relation between the fan clutch and water pump. The malfunction of one of these could cause the malfunction of the other.

BE SURE FAN IS SEATED SQUARE WITH WATER PUMP SHAFT.

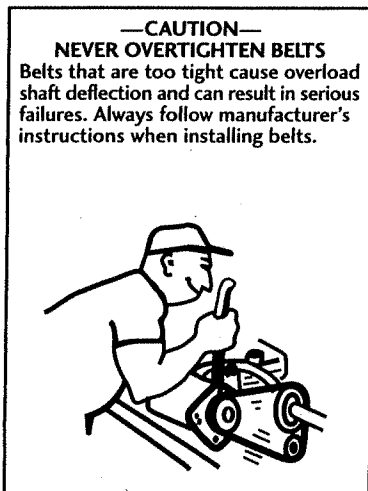
FAN WOBBLE DURING ROTATION WILL CAUSE SHAFT TO VIBRATE, CONTRIBUTING TO BEARING AND SHAFT FAILURE.



NOTE:

FOUR SPECIALLY HEAT TREATED BOLTS ARE SUPPLIED WITH THIS FAN CLUTCH TO MOUNT FAN TO CLUTCH BODY – DO NOT USE OLD BOLTS. (FAILURE TO USE NEW BOLTS VOIDS WARRANTY.)

4. Mount new fan clutch to water pump pad, reusing old lock washers. Tighten these bolts to 15-20 Ft./Lbs.



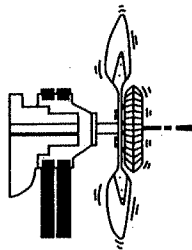
CAUTION: NEVER PUT HEAD OR BODY UNDER HOOD WHILE ENGINE IS RUNNING!

INSTALACIÓN:

1. Remueva el embrague del abanico aflojando cuatro pernos de montaje en el eje de la bomba de agua. Algunos embragues de abanico en las camionetas ligeras Ford de último modelo tienen ejes roscados. Remueva el eje del embrague del abanico desenroscándolo del eje de la bomba de agua.
2. Remueva el aspa del abanico del embrague del abanico e inspeccionalo por daños (Ver fig. 1). Reinstale el aspa del abanico en el nuevo embrague del abanico usando nuevos pernos que se proveen. Apriete los pernos con torsión de 15-20 pies/libra.
3. La ilustración muestra la relación entre el embrague del abanico y la bomba de agua. El malfunción de uno de ellos puede ocasionar que el otro también funcione mal.

ASEGÚRESE QUE EL ABANICO ESTE ASENTADO PERPENDICULARMENTE CON EL EJE DE LA BOMBA DE AGUA.

EL TAMBALEO DEL ABANICO DURANTE LA ROTACIÓN CAUSARA LA VIBRACIÓN DEL EJE QUE CONTRIBUYE A LA FALLA DE LA CHUMACERA Y DEL EJE.



NOTE:

SE HAN PROPORCIONADO CON ESTE EMBRAGUE DEL ABANICO CUATRO PERNOS QUE HAN SIDO FABRICADOS CON UN TRATAMIENTO TÉRMICO ESPECIAL PARA EL MONTAJE DEL ABANICO A LA CAJA DEL EMBRAGUE – NO USE LOS PERNOS VIEJOS (AL NO USAR LOS PERNOS NUEVOS SE ANULA LA GARANTÍA).

4. Monte el nuevo embrague del abanico al cojín de la bomba de agua volviendo a usar los pernos originales. Apriete esto pernos con torsión de 15-20 pies/libra.



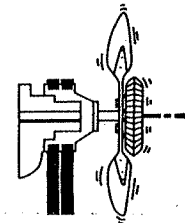
CUIDADO: ¡NUNCA PONGA LA CABEZA O EL CUERPO BAJO LA CUBIERTA DEL MOTOR MIENTRAS EL MOTOR ESTE EN MARCHA!

MONTAGE:

1. Enlevez l'embrayage du ventilateur en dévissant les quatre boulons de montage près de l'arbre de la pompe à eau. Les embrayages de ventilateurs de certains modèles récents de camionnettes Ford sont dotés d'un arbre fileté. Enlevez-le en dévissant l'arbre de l'embrayage du ventilateur de l'arbre de la pompe à eau.
2. Enlevez la pale du ventilateur de l'embrayage du ventilateur. Vérifiez alors la pale du ventilateur pour découvrir tout dégât (voir fig. 1). Posez la pale du ventilateur sur le nouvel embrayage du ventilateur avec les boulons neufs fournis. Serrez au couple de 15 à 20 pi/lb.
3. L'illustration montre la relation entre l'embrayage du ventilateur et la pompe à eau. Le mauvais fonctionnement de l'un des deux pourrait causer le mauvais fonctionnement de l'autre.

ASSUREZ-VOUS QUE LE VENTILATEUR EST DE NIVEAU AVEC L'ARBRE DE LA POMPE À EAU.

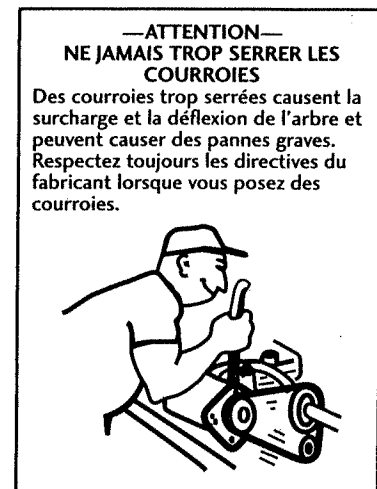
L'OSCILLATION DU VENTILATEUR DURANT LA ROTATION PROVOQUERA LA VIBRATION DE L'ARBRE CONTRIBUANT À UNE PANNE DU ROULEMENT ET DE L'ARBRE.



NOTA :

QUATRE BOULONS SPÉCIALEMENT TRAITÉS CONTRE LA CHALEUR SONT FOURNIS AVEC CET EMBRAYAGE DE VENTILATEUR POUR LE MONTAGE DU VENTILATEUR AU CORPS DE L'EMBRAYAGE. N'UTILISEZ PAS DE VIEUX BOULONS (L'USAGE DE VIEUX BOULONS AU LIEU DES BOULONS NEUFS FOURNIS ANNULE LA GARANTIE).

4. Reliez le nouvel embrayage de ventilateur au palier de la pompe à eau en utilisant les boulons d'origine et les rondelles-ressort. Serrez ces boulons au couple de 15 à 20 lb/pi.



ATTENTION: NE METTEZ JAMAIS LA TÊTE OU LE CORPS SOUS LE CAPOT LORSQUE LE MOTEUR EST EN MARCHÉ!