

STEERING

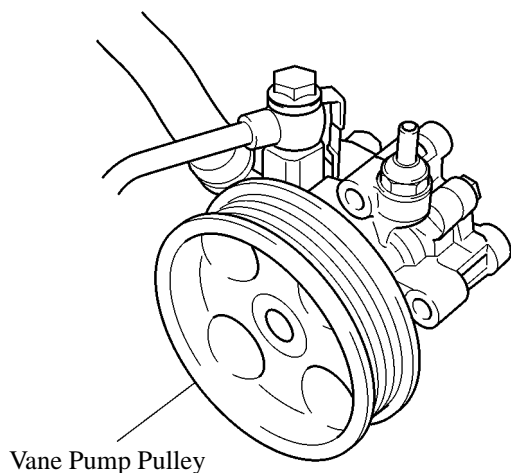
■ DESCRIPTION

- As in the 2UZ-FE engine model, a rack and pinion type steering gear and an engine revolution sensing type power steering are used on all models.
- The following chart describes the changes from steering system on the '02 model to steering system on the '03 model.

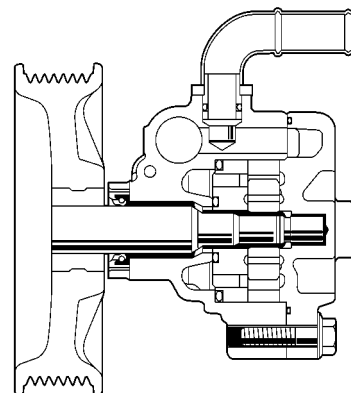
Item	Outline
Vane Pump	<ul style="list-style-type: none"> ● A compact and lightweight vane pump, which uses die-cast aluminum as the material for its housing is used. ● A plastic vane pump pulley has been adopted. ● As on the 2UZ-FE engine model, a separate plastic reservoir tank is used.
Steering Gear	<ul style="list-style-type: none"> ● A variable gear ratio type steering rack has been adopted. ● A hollow steering rack is used for weight reduction. ● Internal-external tube bushings are used to mount the steering gear on the vehicle. See the 2003 4Runner New Car Features (Pub. No. NCF 232U) for detail of Steering Gear.
Steering Column	<ul style="list-style-type: none"> ● The tilt mechanism in the steering column is used as standard equipment on SR5 grade. ● The tilt and telescopic mechanisms in the steering column are used as standard equipment on Limited grade and optional equipment on SR5 grade. ● The steering column is used an energy absorbing mechanism that uses energy absorbing plate on the all models. ● A main shaft made of aluminum has been adopted for weight reduction. See the 2003 4Runner New Car Features (Pub. No. NCF 232U) for detail of Steering Column.

■ VANE PUMP

- A compact and lightweight vane pump, which uses die-cast aluminum as the material for its housing, is used. By optimizing its internal construction, this vane pump has realized a low-friction operation, which leads to low fuel consumption.
- A plastic vane pump pulley and plastic reservoir tank which separately locates from vane pump assembly have been adopted. Thus, total weight of the vane pump assembly and reservoir tank has been reduced.



238CH26

**Cross Section**

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Service Tip

The supply parts (vane pump assembly, and vane pump shaft with vane pump pulley) for the vane pump pulley are made of iron.