NISSAN RE4R01A-HD

PARTS INTERCHANGEABILITY

CHANGE: At the start of production for the 2001 model year the RE4R01A underwent significant changes in many of the internal parts which include the pump and converter as well as many of the drive and driven components.

REASON: These changes were implemented in order to create a "heavy duty" version of this transmission to accommodate the more powerful 3.5 Liter engine that the Nissan Pathfinder and Infiniti QX4 were to receive.

PARTS AFFECTED:

(1) The Light Duty Low/Reverse Clutch Piston is .965" tall and uses individual return springs and retainer.
The Heavy Duty Low/Reverse Piston is .709" tall and uses a return spring assembly.

(2) The Light Duty Forward Drum has a 3.78" opening for the sprag which is a 34 element unit (Refer to Figure 1) and the low/reverse clutch lug area is1.77" tall.
The Heavy Duty Forward Drum has a 3.86" diameter opening for the sprag which is a 30 element unit and the low/reverse clutch lug area is1.65" tall.

(3) The Light Duty Overrun Sprag Outer Race is stamped and has an overall height of 2.382"
The Heavy Duty Overrun Sprag Outer Race is cast and has an overall height of 2.47"

(4) The Light Duty Rear Planet is a Four (4) Pinion design, (Refer to Figure 2).
The Heavy Duty Rear Planet is a Five (5) Pinion design, (Refer to Figure 2).

(5) The Light Duty Front Planet is a Three (3) Pinion design and the pinions are riveted.
The Heavy Duty Front Planet is a Four (4) Pinion design and the pinions are held in by screws, (Refer to Figure 3).

(6) The Light Duty High Clutch Hub is .875" in overall height, (Refer to Figure 4).
The Heavy Duty High Clutch Hub is 1.133" in overall height, (Refer to Figure 4).

(7) The Light Duty High Clutch Drum is stamped and is 2.030" in overall height. It will accept up to Four (4) Friction Plates. The Reverse Input Clutch Hub at the bottom of the drum is 5.295" in diameter, (Refer to Figure 5).
The Heavy Duty High Clutch Drum is a thicker stamping and is 2.505" in overall height. It will accept up to Five (5) Friction Plates. The Reverse Input Clutch Hub at the bottom of the drum is 5.017" in diameter, Refer to Figure 5).

(8) The Light Duty Front Sun Gear is an Eight (8) Lug design.
The Heavy Duty Front Sun Gear is a Twelve (12) Lug design, (Refer to Figure 6).

(9) The Reverse Input Friction Plates for the Light Duty and Heavy Duty both have 30 teeth. However, the Light Duty Friction Plates have a LARGER inside diameter then the Heavy duty Friction Plates have.

(10) The Light Duty Reverse Input Drum is stamped and is 2.559" in overall height. The drum has Eight (8) Lugs in order to accommodate the Eight (8) Lug Front Sun Gear.
The Heavy Duty Reverse Input Drum is cast and is 3.011" in overall height. The drum has Twelve Lugs in order to accommodate the Twelve (12) Lug Front Sun Gear, (Refer to Figure 6).

(11) The light Duty 2-4 Band is 2.250" wide, (Refer to Figure 7).
The Heavy Duty Band is approximately 2.750" wide, (Refer to Figure 8).

(12) A number of the Internal Bearings have changed from the closed one piece design to the open two piece design.

NISSAN RE4R01A-HD

PARTS INTERCHANGEABILITY

INTERCHANGEABILITY:

continued: Interchange of all the above mentioned parts is possible, however, a great deal of attention must be paid to clearances between all involved components.

Care must be taken when exchanging pump assemblies since some pump covers have provisions for a Turbine Speed Sensor and some do not. The use of this speed sensor also requires a case that can accommodate the sensor, (it has a hole).

The input shaft must also have a splined reluctor to excite the turbine speed sensor as some do not have these splines.

NOTE: If you put a pump in that has the hole for the turbine speed sensor without the speed sensor in the hole, you will have a no move condition because all converter charge oil will be dumped out of the speed sensor hole.

Many thanks to Paul at Hardparts For Transmissions for supplying the parts that made this the presentation of this information possible.

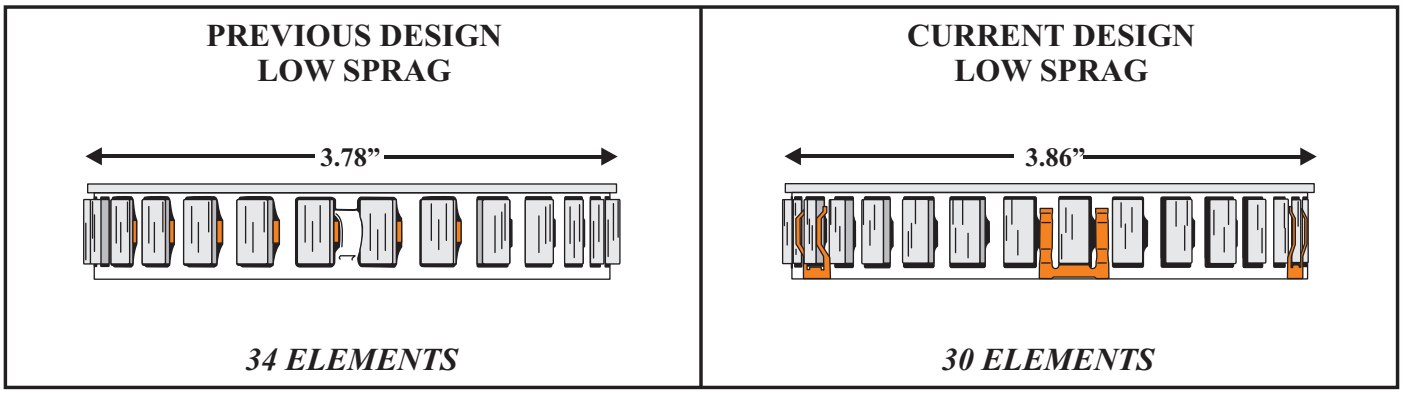


Figure 1

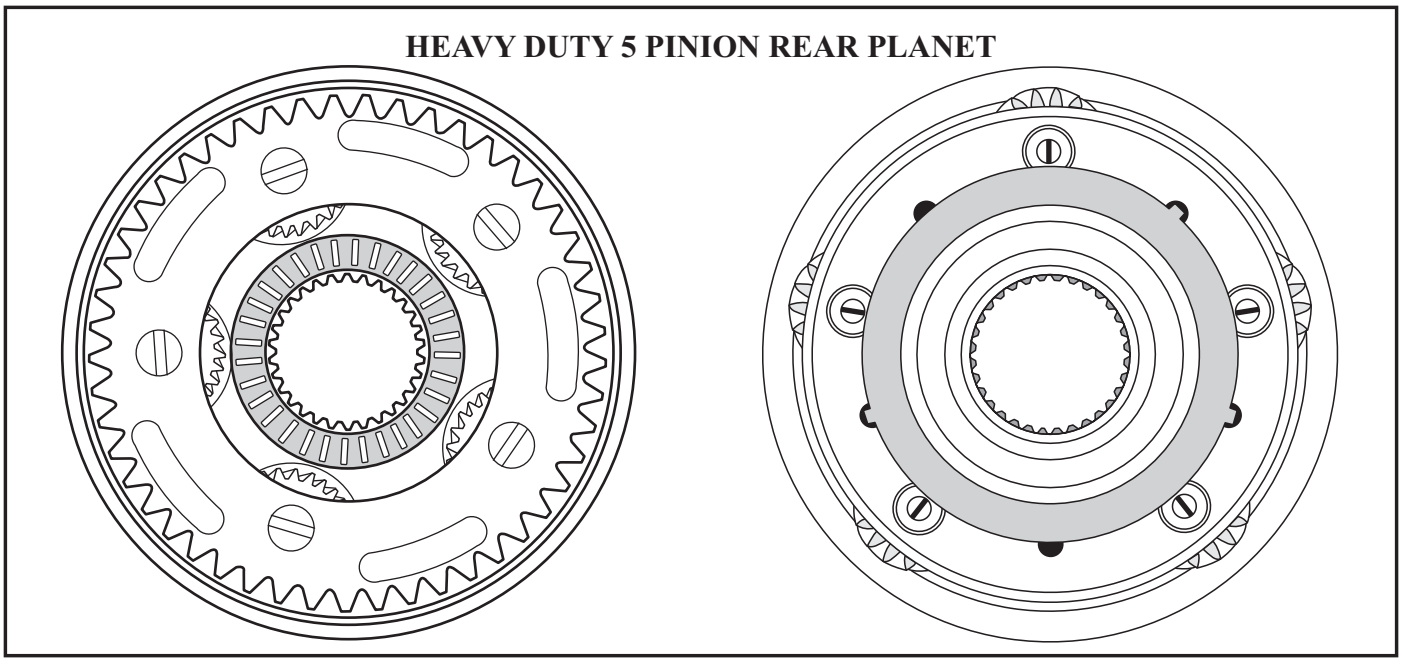


Figure 2

PARTS INTERCHANGEABILITY

HEAVY DUTY 4 PINION FRONT PLANET

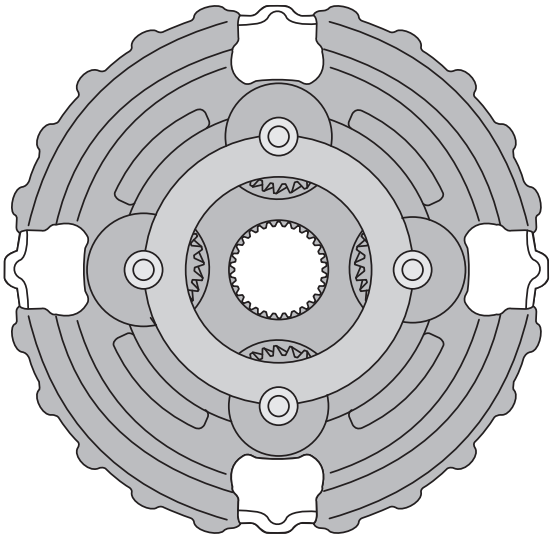
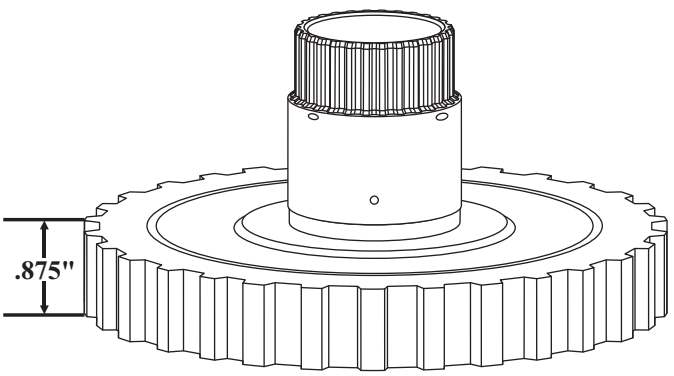


Figure 3

LIGHT DUTY
HIGH CLUTCH HUB



HEAVY DUTY
HIGH CLUTCH HUB

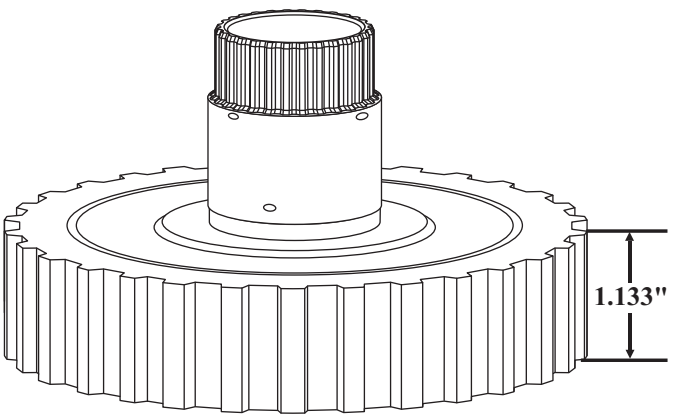


Figure 4

PARTS INTERCHANGEABILITY

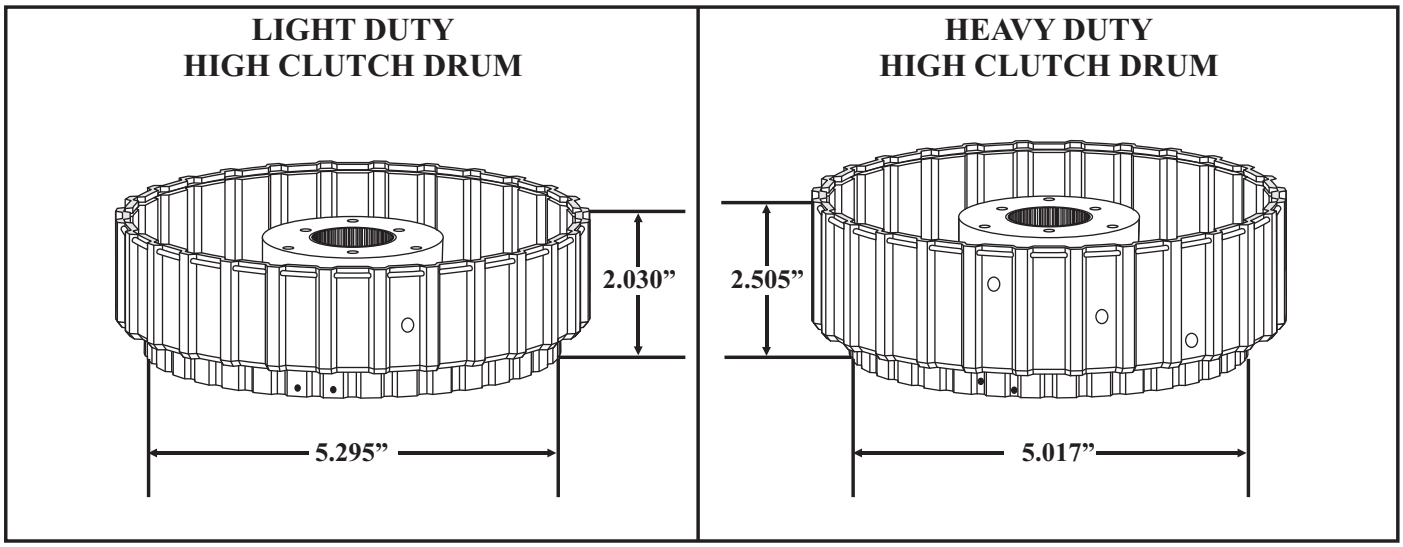


Figure 5

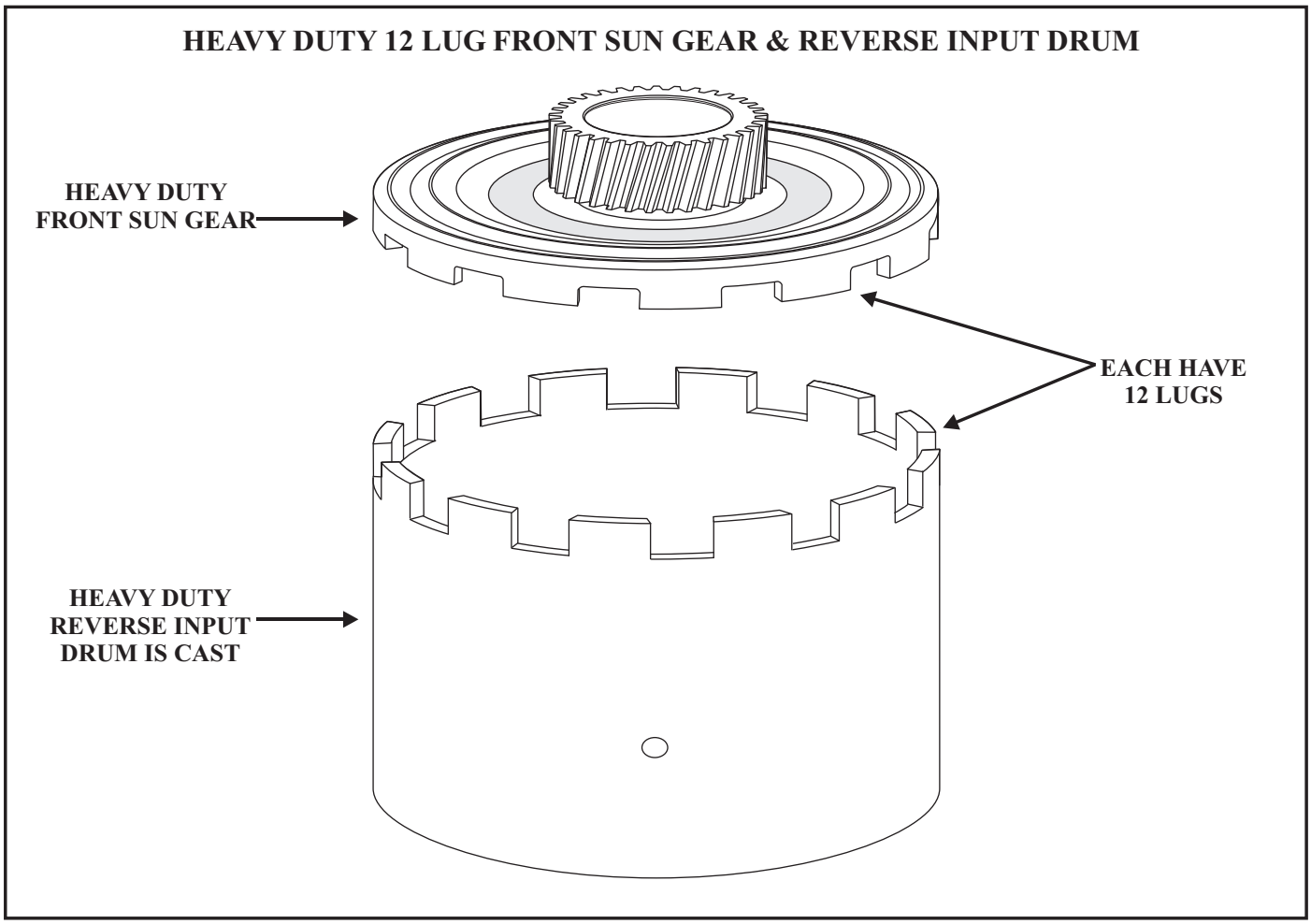


Figure 6

PARTS INTERCHANGEABILITY

LIGHT DUTY 2-4 BAND

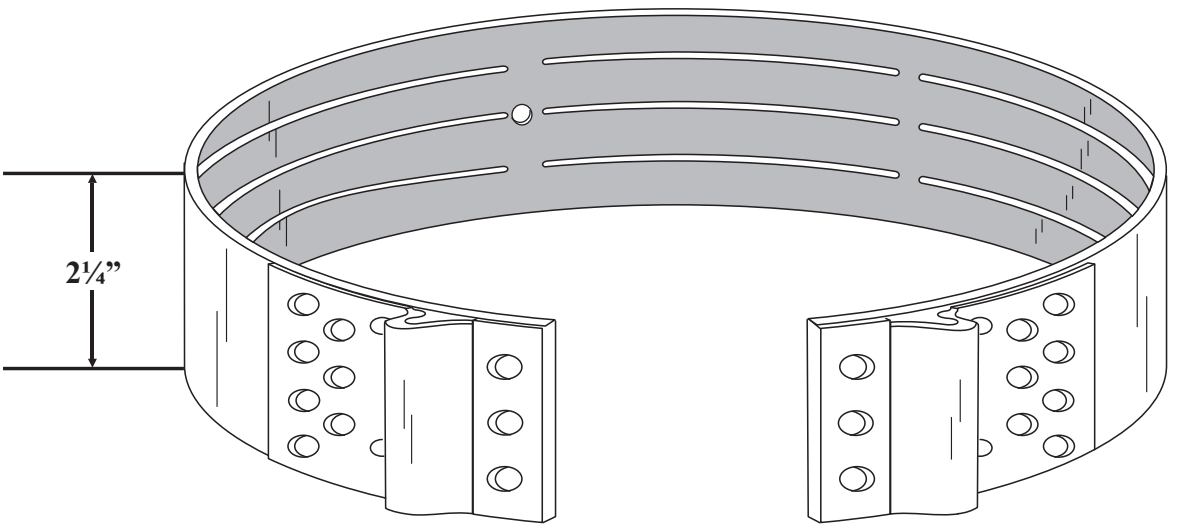


Figure 7

HEAVY DUTY 2-4 BAND

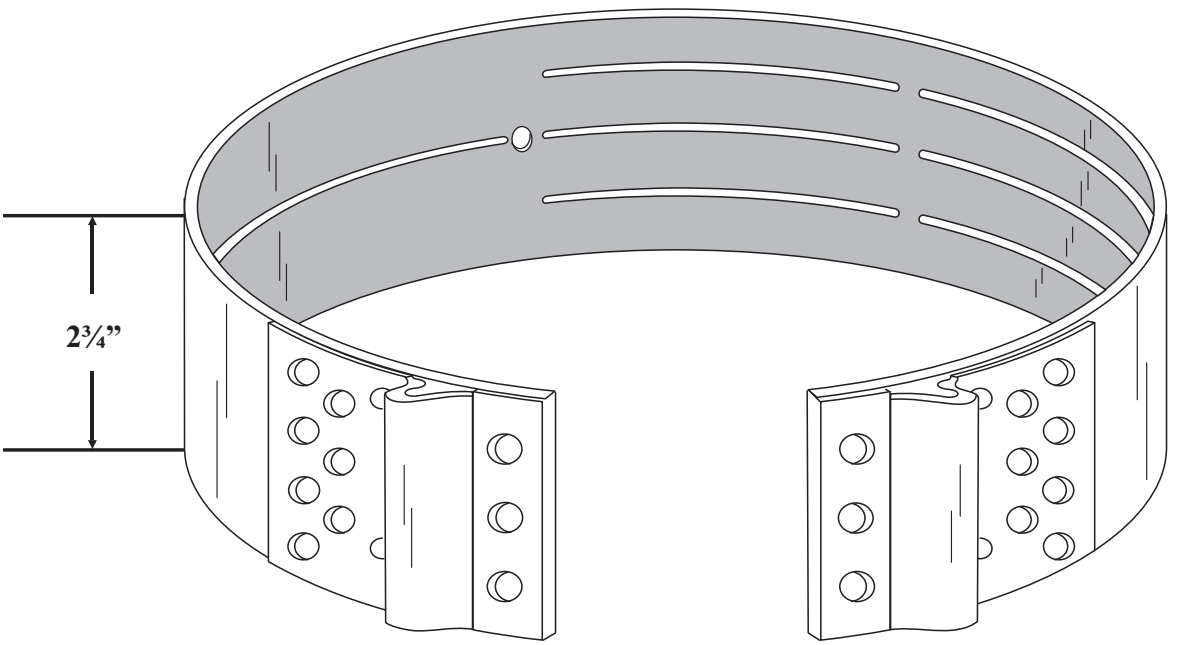


Figure 8