



CHRYSLER A518 OVERDRIVE SECTION PLANETARY CHANGES

CHANGE: Beginning in model year 1995 Chrysler introduced a new design Overdrive Planetary Gear Set with 15 degree helical cut gears, to replace the previous design straight cut (spur) gears. The straight cut gears were found in the Turbo Diesel engine models equipped with the 47RH. The 46RH used a 4 pinion 22 1/2 degree helical cut overdrive gear set. This change has created a service concern for transmission technicians, as you now have two different angles of helical cut overdrive gear sets for the A518 transmission.

REASON: Reduction of noise concerns from the straight cut spur gears.

PARTS AFFECTED:

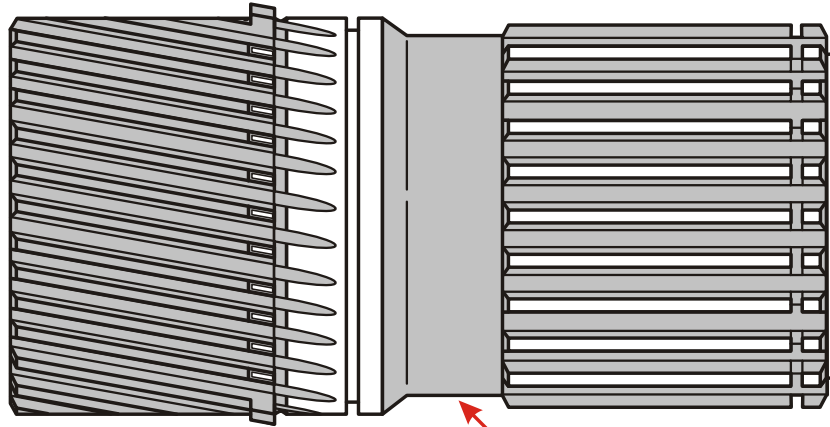
- (1) **OVERDRIVE SUN GEAR** - Now has a 15 degree helical cut gear and is easy to identify by the I.D. groove cut into the sun gear, to distinguish it from the 22 1/2 degree helical cut sun gear. Refer to Figure 1 for illustrations and identification of all three overdrive sun gears.
- (2) **OVERDRIVE INTERNAL RING GEAR** - Now has a 15 degree helical cut gear and is easy to identify by the I.D. groove cut into the ring gear, to distinguish it from the 22 1/2 degree helical cut ring gear. Refer to Figure 2 for illustrations and identification of all three overdrive internal ring gears.
- (3) **OVERDRIVE PLANETARY CARRIER** - Now has 15 degree helical cut pinion gears and the 22 1/2 degree helical cut gears are also still used. There are not any identification marks on the carriers to distinguish between the two, but they will not assemble if the wrong components are used. Refer to Figure 3 for illustration of the 4 pinion carriers.
Refer to Figure 4 for illustration of the 5 pinion straight cut (spur) gear and is easy to identify because of the straight cut gears.
Refer to Figure 5 for illustration of the 5 pinion, 15 degree helical cut pinion gears, that was used to replace the straight cut design to reduce noise in the unit. The 5 pinion, 15 degree helical cut planetary must be used in the Turbo Diesel and the V-10 models.

INTERCHANGEABILITY:

The new design 5 pinion, 15 degree helical cut overdrive carrier will replace the straight cut design when used with the 15 degree sun gear and the 15 degree internal ring gear, and is highly recommended. The 5 pinion design **must** be used in the Turbo Diesel and the V-10 models, and is recommended for any heavy duty application.

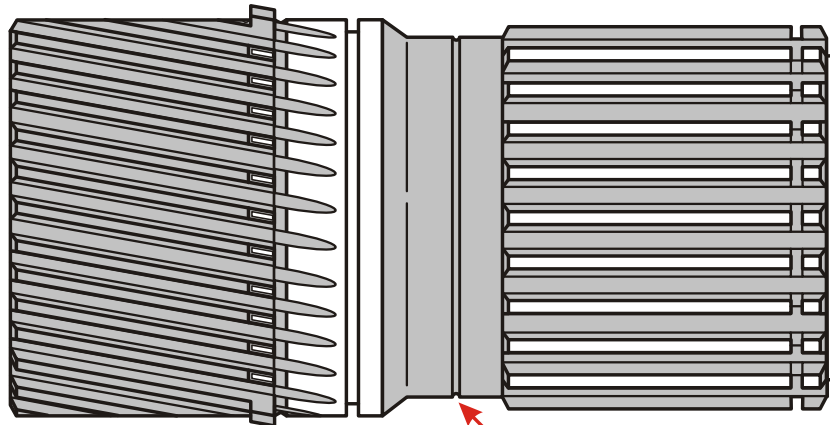
The 4 pinion, 22 1/2 degree helical cut set-up is used in the 46RH models, but could be upgraded to the 5 pinion, 15 degree set-up, for heavy duty applications as necessary.

22 1/2 DEGREE OVERDRIVE SUN GEAR



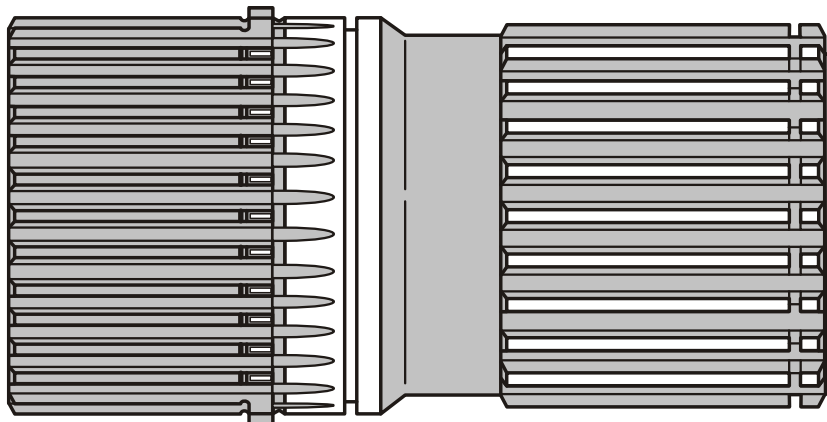
No Identification Groove

15 DEGREE OVERDRIVE SUN GEAR



Has Identification Groove

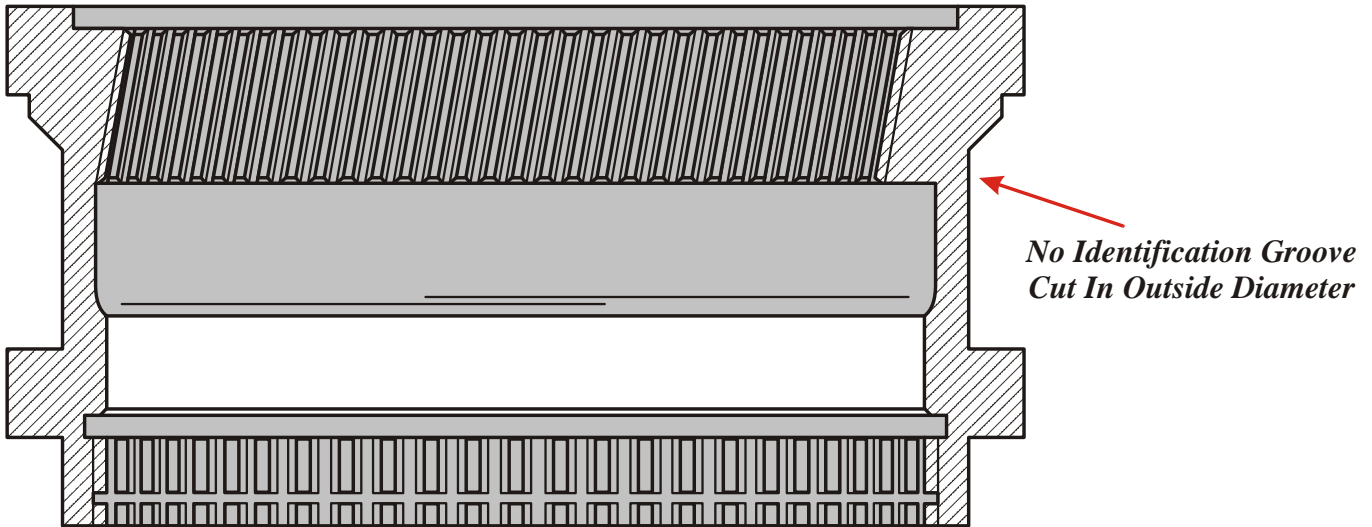
STRAIGHT CUT (SPUR) OVERDRIVE SUN GEAR



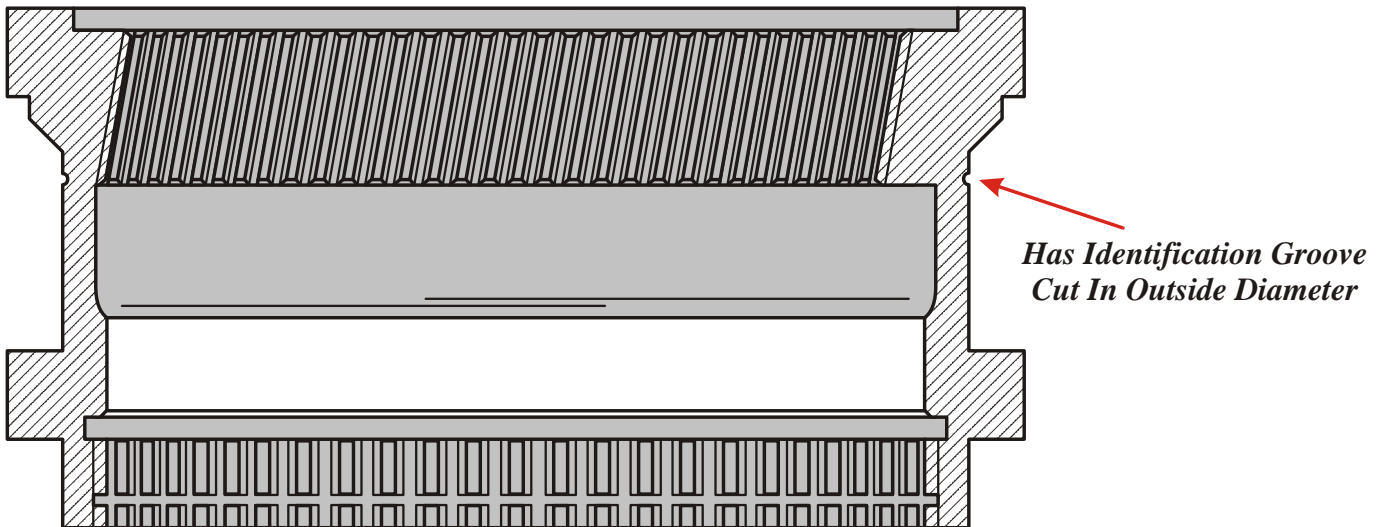
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Figure 1

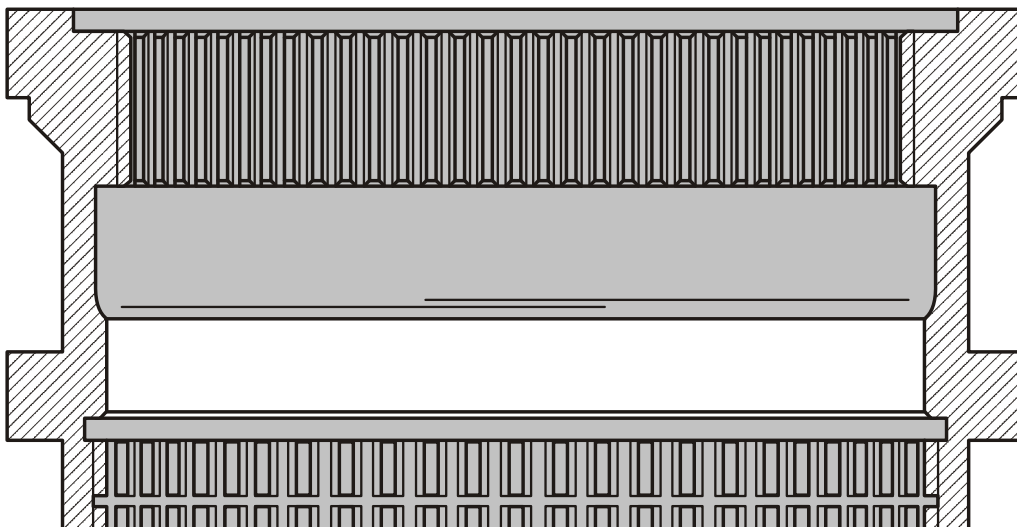
22 1/2 DEGREE OVERDRIVE RING GEAR



15 DEGREE OVERDRIVE RING GEAR



STRAIGHT CUT (SPUR) OVERDRIVE RING GEAR

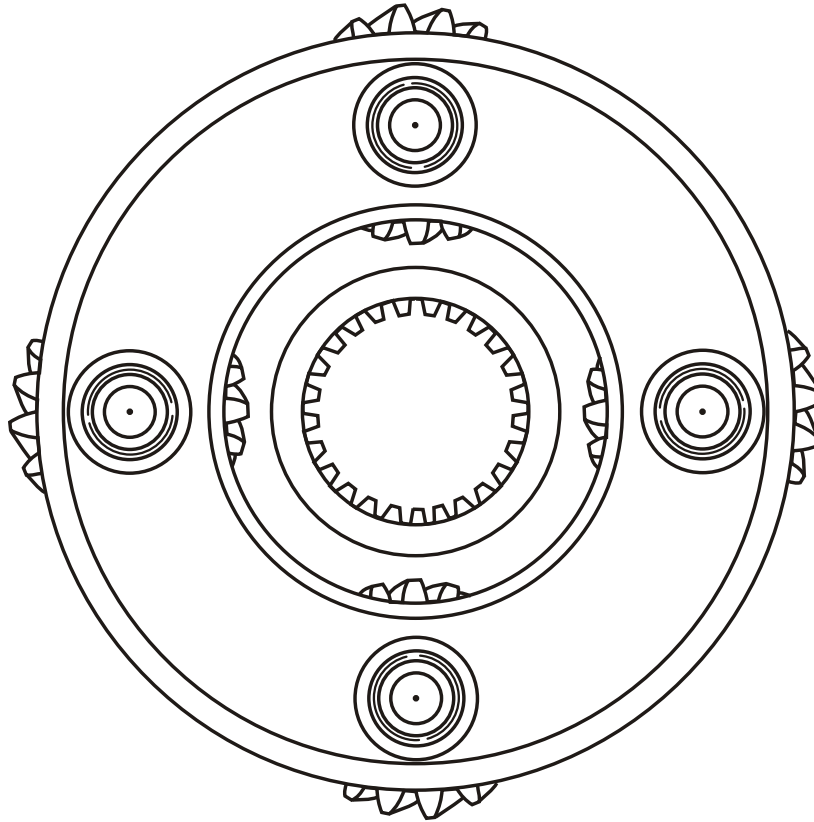


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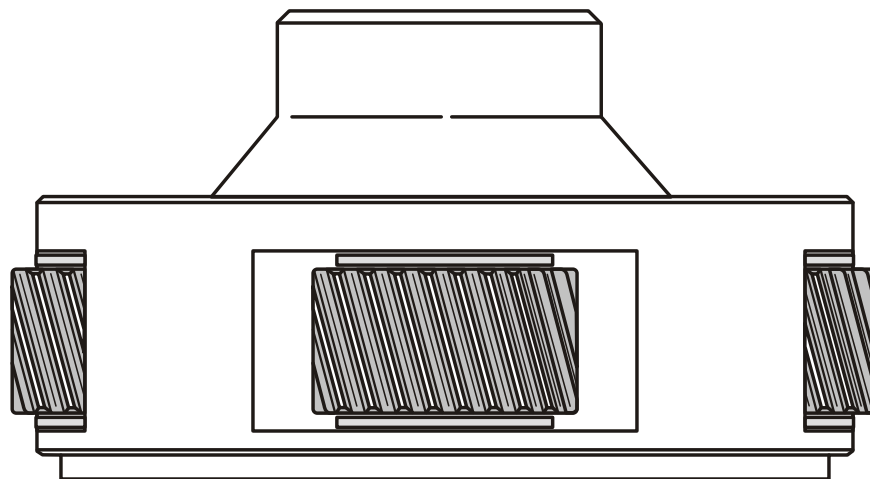
Figure 2

4 PINION OVERDRIVE PLANETARY CARRIER

MANUFACTURED IN BOTH 15 DEGREE AND 22 1/2 DEGREE HELICAL CUT GEARS



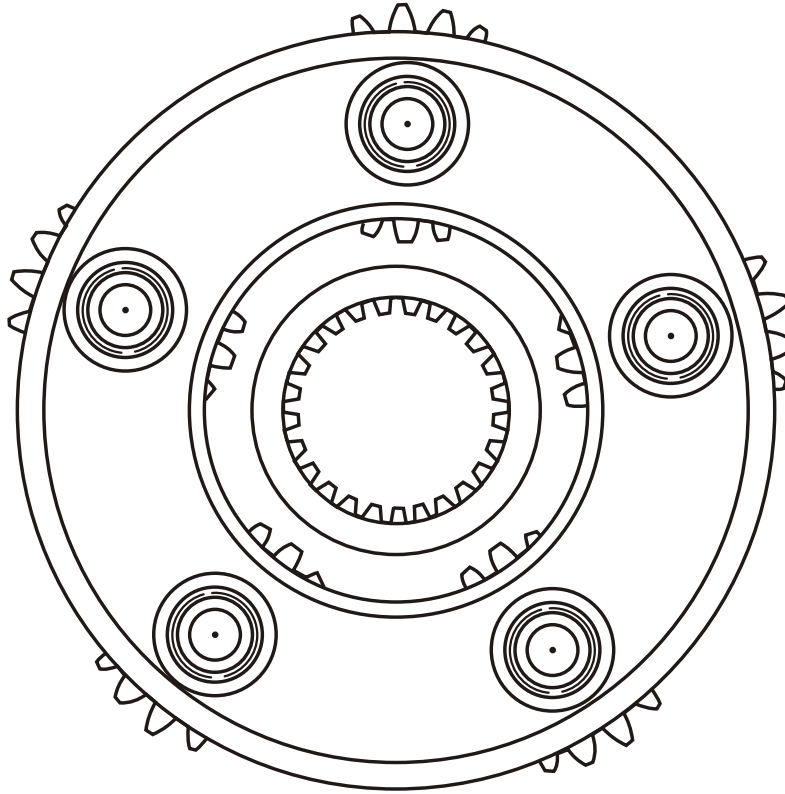
*NO POSITIVE IDENTIFICATION BUT
WILL NOT ASSEMBLE WITH WRONG COMPONENTS*



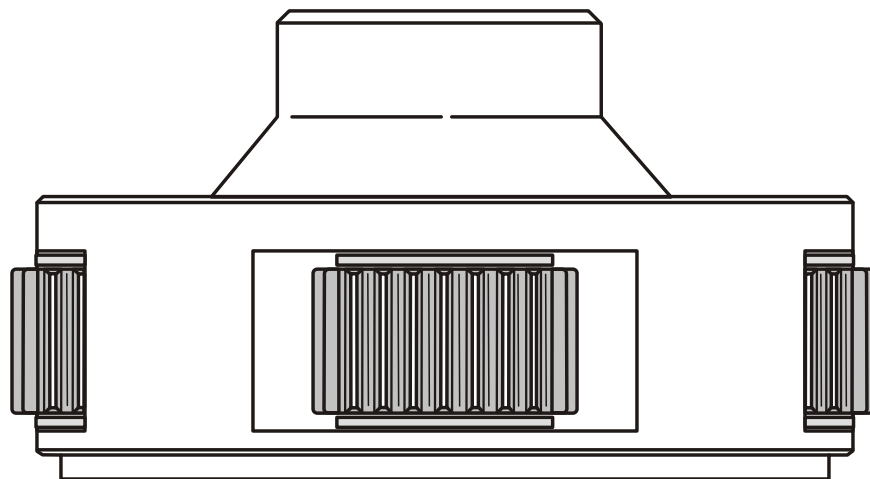
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Figure 3

5 PINION STRAIGHT CUT OVERDRIVE PLANETARY CARRIER *FIRST INTRODUCED INTO THE TURBO DIESEL MODELS FOR STRENGTH*



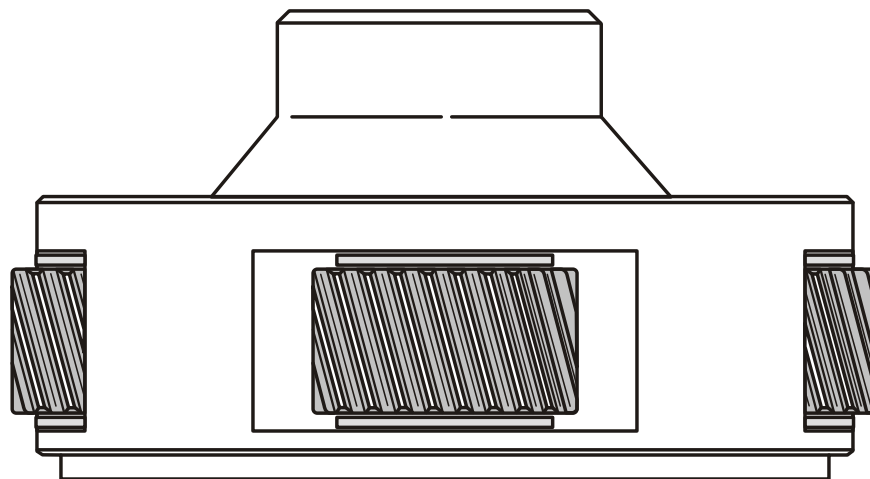
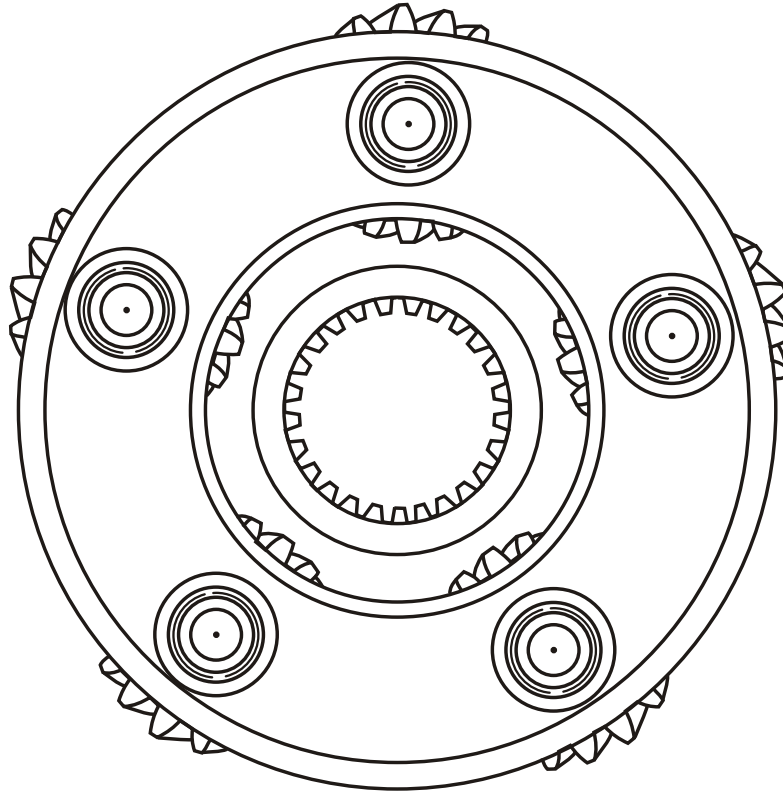
***REPLACED WITH 15 DEGREE HELICAL CUT
GEARS IN 1995 TO REDUCE NOISE***



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Figure 4

5 PINION 15 DEGREE HELICAL CUT OVERDRIVE PLANETARY CARRIER *INTRODUCED IN 1995 FOR TURBO DIESEL AND V-10 MODELS TO REDUCE NOISE*



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Figure 5