

Item	Part Number	Description
1	7D014	Washer - pump drive sprocket thrust (support side)
2	7G099	Washer - pump drive sprocket thrust
3	7G273	Washer - pump driven sprocket thrust
4	7M102	Bearing and race assembly - stator support No. 11
5	7M102	Bearing and race assembly - front sun gear No. 10
6	7H338	Cone and roller assembly - transfer shaft bearing
7	4221	Cone and roller assembly - differential bearing
8	4221	Cone and roller assembly - differential bearing
9	7H338	Cone and roller assembly - transfer shaft bearing
10	7H375	Bearing and race assembly - front/center planetary No. 8
11	7F244	Bearing and race assembly - front planetary No. 9
12	7F241	Bearing and race assembly - center sun gear (front) No. 7
13	7C096	Bearing and race assembly - center sun gear (rear) No. 6
14	7C096	Bearing and race assembly - Overdrive (O/D) clutch hub No. 2
15	7H026	Bearing and race assembly - cover assembly No. 1
16	7M102	Bearing and race assembly - rear sun gear No. 3

17	7G105	Bearing and race assembly - rear planetary No. 4
18	7G177	Bearing and race assembly - center/rear planetary No. 5

Lubrication

Transmission fluid enters the lubrication circuits after flowing through the transmission fluid cooler, mounted at the front of the vehicle. When the transmission fluid is not up to operating temperature a thermal bypass valve, mounted in line of the transmission fluid cooler tubes, allows the transmission fluid to bypass the transmission fluid cooler. Transmission fluid returns to the transaxle from the transmission fluid cooler tubes through the back transmission fluid cooler tube.

The transmission fluid enters 2 main lubrication circuits, the input shaft and final drive lubrication circuits, through the transaxle cover and flows through passages in the transaxle to lubricate the transaxle.

The transmission fluid in the input shaft circuit flows from the back of the input shaft toward the front of the input shaft and passes through ports in the input shaft to lubricate the planetary gearset, clutches, stator support and other components of the transaxle.

The transmission fluid in the final drive lubrication circuit flow from the rear cover to the transfer shaft and lubricates the transfer shaft bearings. The transmission fluid flows through the transfer shaft and feeds both of the differential bearings.



Item	Part Number	Description
1	-	Thermal bypass valve
2	-	Transmission fluid cooler return tube

Lubrication Circuits



Item	Part Number	Description
1	-	Input shaft lubrication circuit
2	-	Final drive lubrication circuit

Park

The park gear is located on the transfer shaft and gear assembly. There are lugs around the outer diameter of the park gear to allow the park pawl to hold the park gear stationary to the transaxle case, which holds the differential in place and keeps the vehicle from moving.

When the manual control lever is rotated to the PARK position, the park lock works as follows:

- The Transmission Range (TR) sensor rotates the range detent plate which pushes the park pawl actuator rod towards the park pawl.
- The actuator rod pivots the park pawl into the lugs on the park gear, locking the gear stationary to the transaxle case.

Park Component Exploded View



Item	Part Number	Description
1	7H557	Transmission Range (TR) sensor and detent plate
2	7A232	Park pawl actuator rod
3	7G101	Park pawl actuator abutment
4	7D412	Park pawl actuator abutment pin
5	7A441	Park pawl
6	7D070	Park pawl return spring
7	7D071	Park pawl pivot pin
8	7D419	Park pawl pivot pin retaining plate
9	7J283	Park pawl pivot pin retaining plate bolt
10	7A233	Park gear
11	7H346	Transfer shaft
12	7H349	Transfer gear
13	7F343	Differential ring gear
14	4207	Differential assembly
15	7005	Torque converter housing
16	7005	Transaxle case

SECTION 307-03: Automatic Transaxle/Transmission Reference	2000 MKS
Manual - 6F50	2009 MIKS

THEORY AND OPERATION

2009 MKS Workshop Manual

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Hydraulic System

Transmission Fluid Filter

The transmission fluid in the sump area at the bottom of the transaxle case flows through a transmission fluid filter to the pump assembly. The pump is bolted to the torque converter housing and is chain driven from a sprocket that is mounted on the stator support and turned by the torque converter.

Fluid Pump and Transmission Fluid Filter Components



Item	Part Number	Description
1	7A098	Transmission fluid filter assembly
2	7A103	Pump assembly
3	7G249	Chain and sprocket assembly
4	7J246	Stator support assembly
5	7005	Transaxle case
6	7005	Torque converter housing

Transmission Fluid Level

The transmission fluid level is checked with the transaxle at normal operating temperature between 80°C and 93°C ($175^{\circ}F$ and $200^{\circ}F$).

The transmission fluid level indicator is part of the transmission fluid filler tube located on the main control cover.

The correct transmission fluid level is between the MIN and MAX in the cross hatches of the transmission fluid level indicator.

Transmission Fluid Level Indicator



	Part	
Item	Number	Description
1	7A020	Transmission fluid level indicator
2	7A228	Transmission fluid filler tube
3	-	Correct transmission fluid level at normal operating temperature 80°C-93°C (175°F-200°F)
4	-	Low transmission fluid level
5	-	High transmission fluid level

Main Control

The hydraulic system has a main control assembly. The main control assembly consists of a valve body and a solenoid body. The valve body contains the hydraulic regulator and multiplex shift valves. The solenoid body contains the shift solenoids that control the hydraulic valves. The solenoid body is serviced as an assembly and can not be disassembled. The solenoid body is controlled by the PCM. The PCM has software stored in it specific to the solenoid body currently in the transaxle, called the solenoid body strategy. A new solenoid body strategy must be downloaded into the PCM anytime a new solenoid body is installed.

Main Control Components



	Item	Part Number	Description
1		7G004	Main control cover assembly

2	7Z369	Solenoid body
3	7A100	Main control valve body
4	7005	Transaxle case

Main Control Valve Body



Valve Body



Lower Valve Body