

BMW ZF6HP FAMILY PLANETARY NOISE ALSO WHEN STOPPED IN DRIVE

- COMPLAINT:** Some 2005 and up BMW vehicles equipped with the ZF6HP family of transmissions may have a complaint of planetary noise, after overhaul, especially when stopped in the Drive position.
- CAUSE:** The cause may be that during the rebuild process, the snap ring retaining the Planetary into the A Clutch drum was not removed correctly and the splined area on the bottom of the planetary carrier was damaged where it sits against the splined area in the A clutch drum. This causes a problem with the planetary being slightly offset which creates the gear noise. This typically happens when the technician slams the A Clutch drum against the floor repeatedly, to remove the planetary. The reason this noise can also be heard in Drive at a stop is because 2005 and up models are capable of “De-Coupling” which means that the A Clutch is only partially applied at a stop, when the computer strategy requirements are met, the turbine shaft will begin to rotate. See the partial oil circuit diagram in Figure 2.
- CORRECTION:** To correct this condition, refer to Figure 3 and using a 90° scribe, push the snap ring inward in the areas shown to release it from the tabs in the A Clutch drum. Replace the planetary or drum as needed if damaged

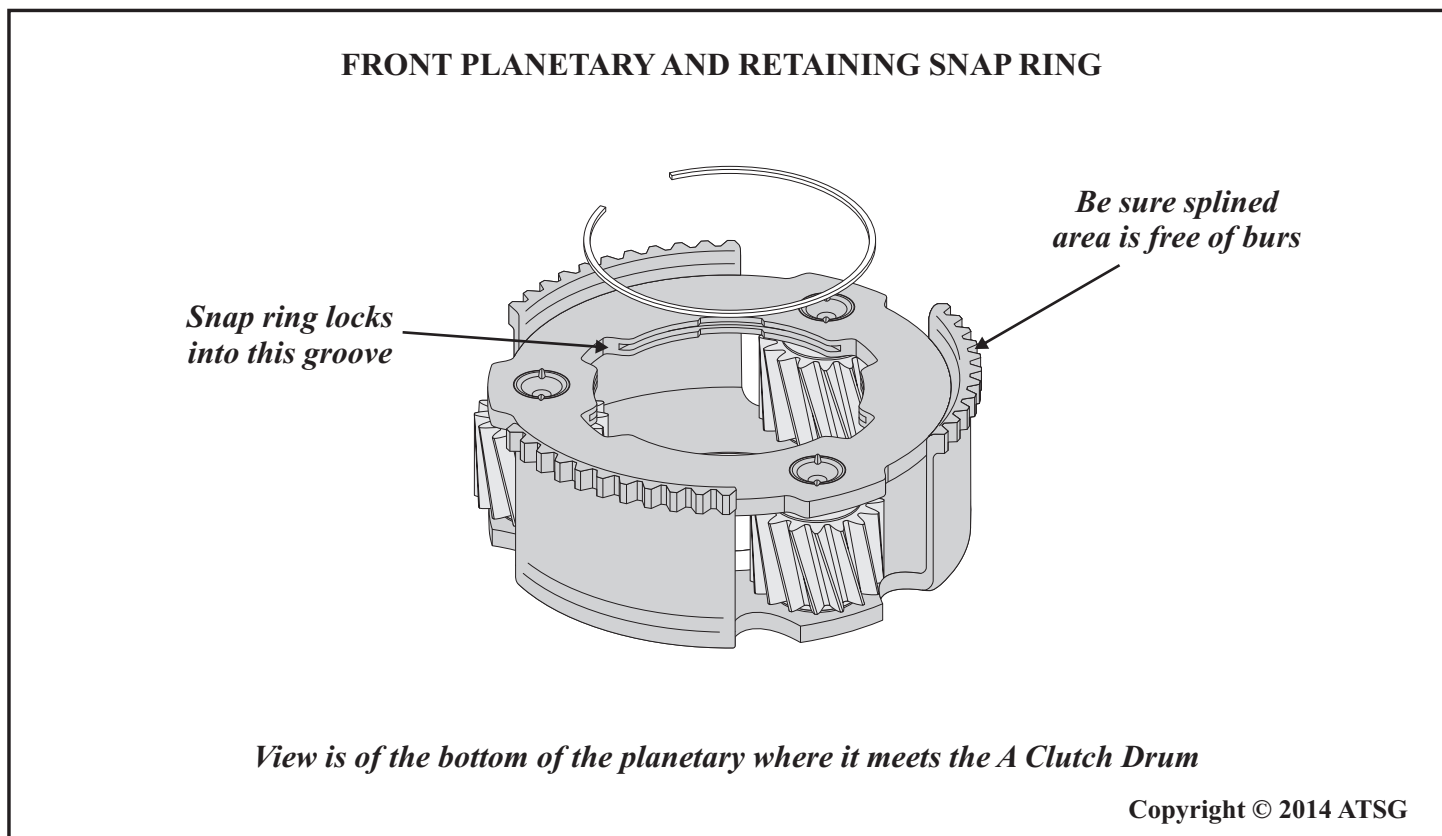
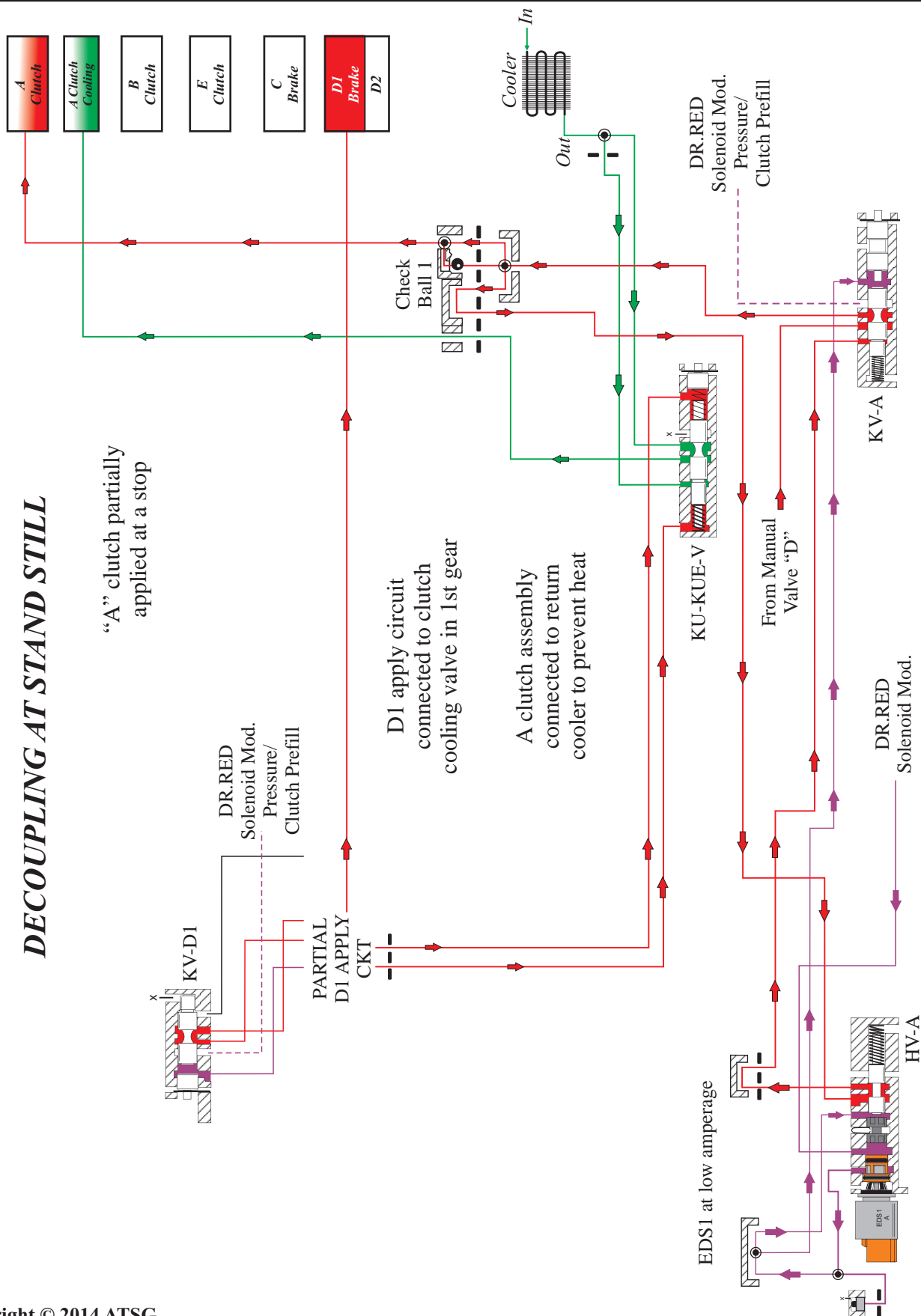


Figure 1

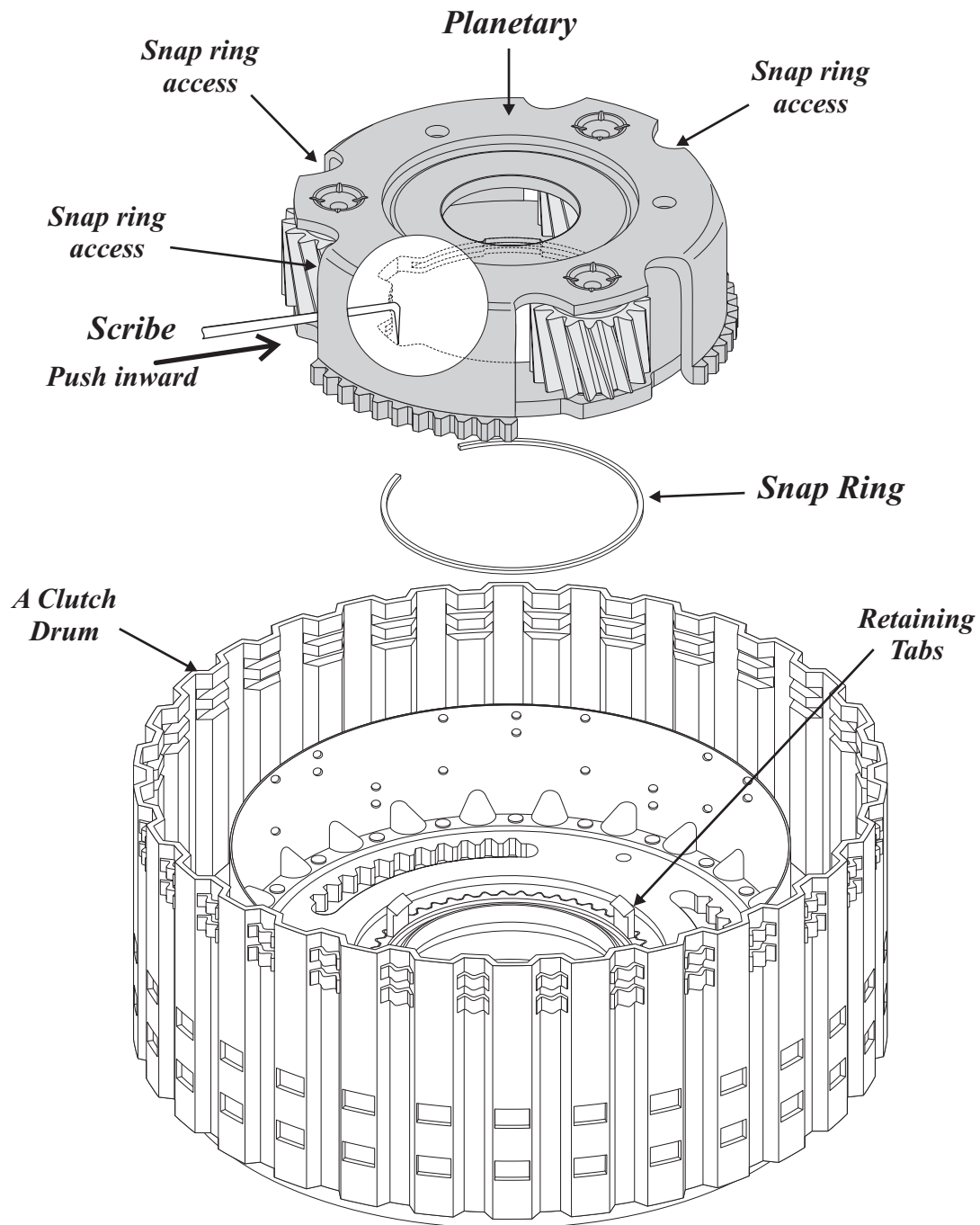
DECOUPLING AT STAND STILL



Copyright © 2014 ATSG

Figure 2

PLANETARY REMOVAL FROM A CLUTCH DRUM



Copyright © 2014 ATSG