

HONDA/ACURA MGHA 5 SPEED FAMILY NEUTRALIZING DOWNSHIFT TO 1ST

COMPLAINT: Before or after overhaul, Honda and Acura vehicles equipped with the MGHA family of transaxles may exhibit a neutralizing condition on a downshift into 1st gear, or a 3-1 passing gear neutral. This condition may be intermittent. This neutralizing condition can be cleared up simply by placing the selector in the Manual 1 position.

CAUSE: The cause may be, a worn low one-way clutch, or a worn inner race for the low one-way clutch, as shown in figure 1. Honda and Acura vehicles equipped with the MGHA family of transaxle utilize a low one-way clutch that locks in 1st gear for take-off. If the low one-way does not hold in 1st, there will be no engagement in 1st until the selector is placed in manual 1st. In this position the low hold clutch is engaged and 1st gear can be attained. The low hold clutch is used to provide engine braking in manual low as well as backing up the sprag by holding 1st gear should the sprag fail. This sprag failure is commonly overlooked, as the low hold clutch hub has to be driven out to inspect the sprag and races (See figure 2).

CORRECTION: Using a suitable bushing driver, remove the low-hold clutch hub from 1st gear, as shown in figure 2. Refer to figure 3 for an exploded view of the low one-way and 1st gear assembly. Replace as necessary. Note: The sprag can only be purchased as a complete assembly. If there is wear on the inner race for the low one-way, 1st gear will have to be replaced. Refer to figure 4 to verify proper freewheel rotation on the low one-way clutch.

SERVICE INFORMATION:

SECONDARY SHAFT LOW CLUTCH HUB (one-way clutch).....23420-RAY-005
SECONDARY SHAFT LOW GEAR23411-P7W-000

Note: Although the one-way-clutch is the same for both Honda and Acura, it is not purchasable separately. You must buy it assembled onto the low gear. The part numbers above are for an Acura MDX. You could purchase the MDX assembly and if the teeth count is the same for the vehicle being worked on, the assembly can be installed. If the teeth count is different, remove the one-way clutch and install it onto the original low gear. Or, just order the entire assembly for the vehicle being worked on.

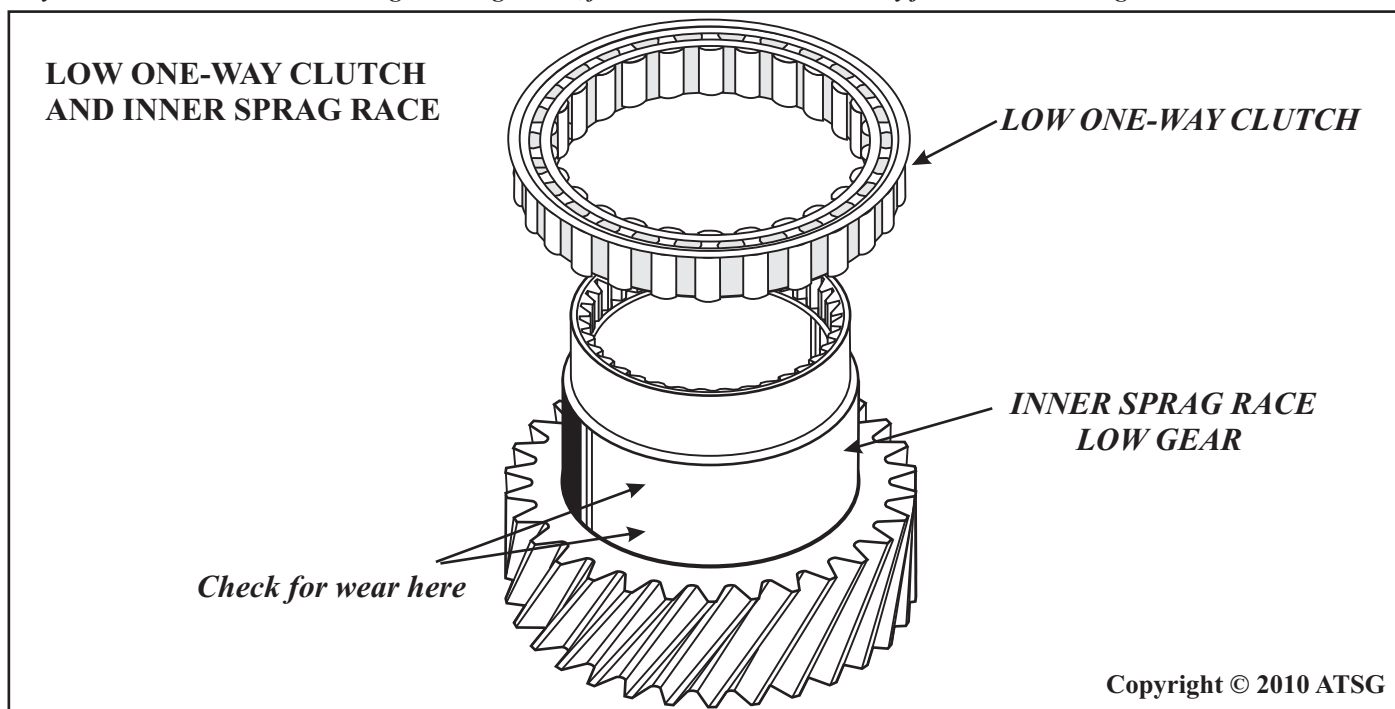
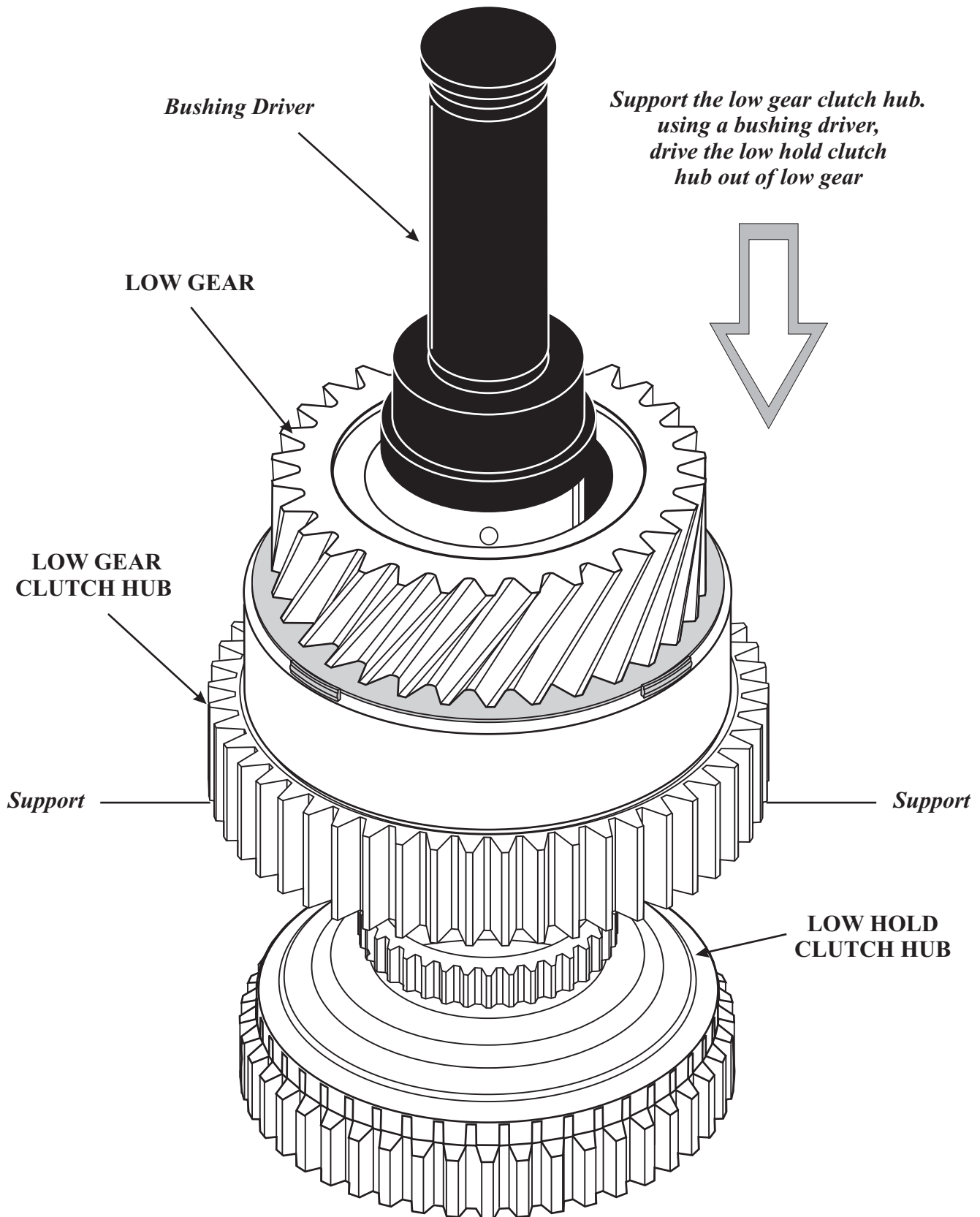


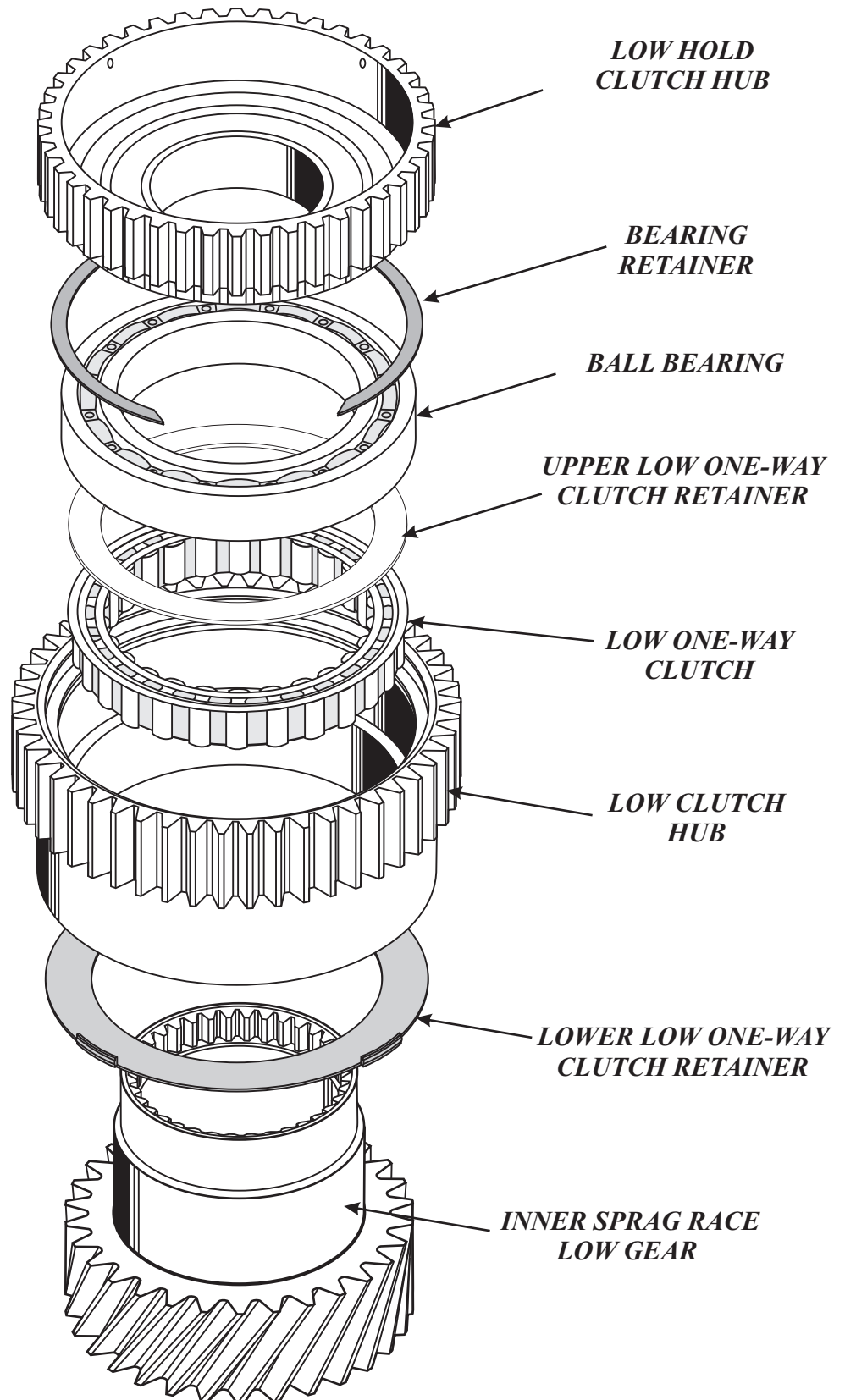
Figure 1

LOW ONE-WAY CLUTCH DIS-ASSEMBLY



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Figure 2

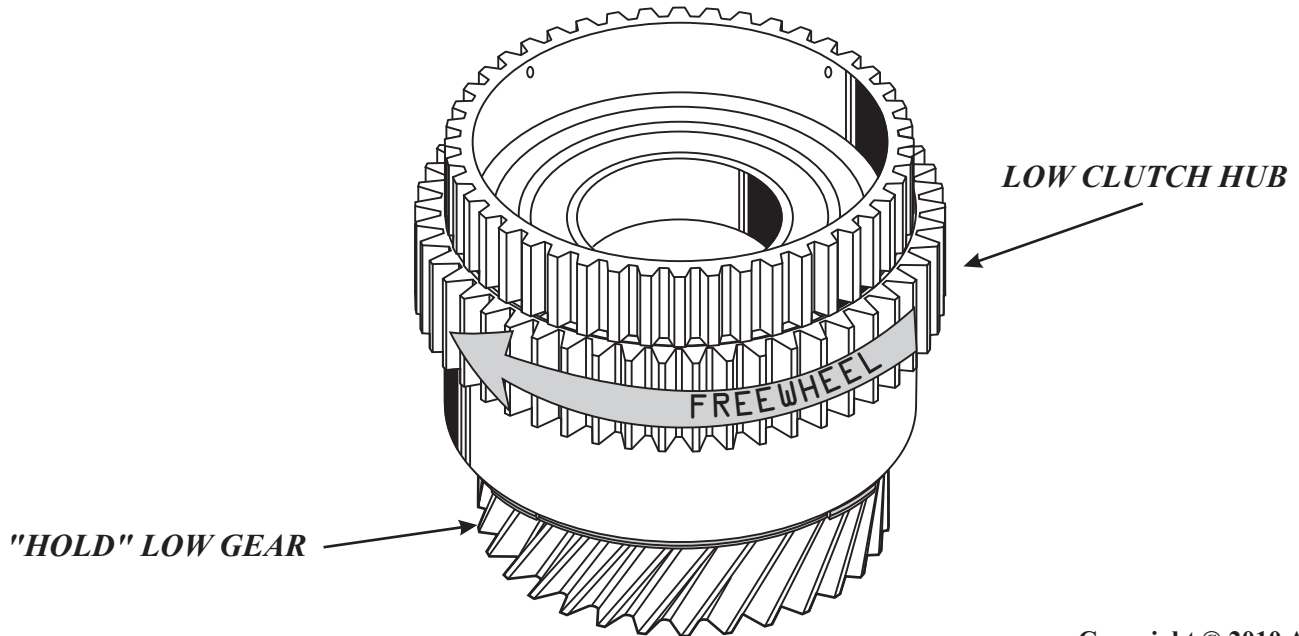
LOW ONE-WAY CLUTCH ASSEMBLY EXPLODED VIEW

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Figure 3

LOW ONE-WAY CLUTCH OPERATION

***THE LOW CLUTCH HUB MUST FREEWHEEL CLOCKWISE
AND LOCK COUNTER CLOCKWISE WHEN HOLDING LOW GEAR***



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Figure 4