Installation of Axle Shaft Thrust Blocks

Several models of Isuzu corporate axles utilize a thrust block in the center of the differential assembly to allow for the correct setting of the axle shaft bearing pre-load. The original block is not compatible with the Lock-Right; substitute parts are included in your new assembly to allow for proper installation of the axle shafts.

The original block is a single part that fits between the side gears and against which the axle shaft ends press. The new preplacement parts are two “half-blocks,” each of which is placed within the locker during installation. Together, these two parts form a new whole block that is the same width as the old one.

The procedure in the Lock-Right installation manual describes a “driver assembly,” which consists of the driver, two pins, and a spacer. Simply place one of the new blocks into the center of each spacer prior to installation into the differentials case. The new block is placed into the spacer with the “U”-shaped side oriented toward the top (hole side) of the driver. Thus, when these two parts meet in the middle, a complete new block is formed.

After the driver assemblies have been placed into the differential case and the springs have been installed, reach into the interior of the assembly with a small screwdriver and orient the two blocks before installing the pinion shaft so that the shaft can pass through them. The blocks will be somewhat loose until axle shaft installation; this condition is normal.

The axle shafts may be installed with the same shims as before removal, since the new block assembly is the same thickness as was the old block. To avoid bearing damage, however, checking the pre-load per the manufacturer’s instructions is recommended.