KPG Slide-Out Mechanisms – System Identification

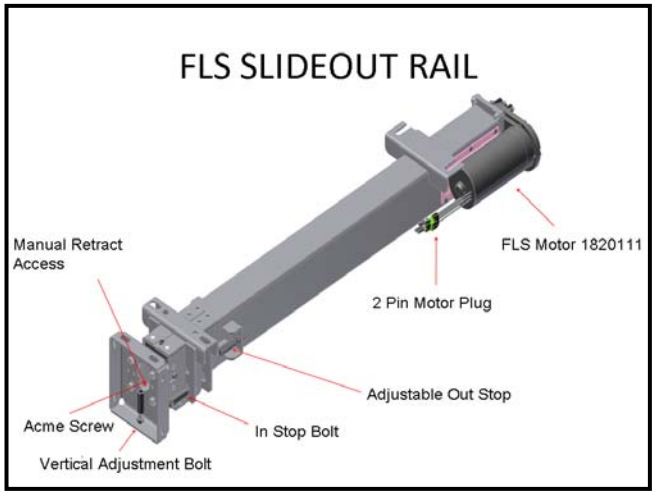
What is it? Who builds it? Identifying the slide mechanism on a motor home can be challenging. It's not unusual for a coachbuilder to use a variety of mechanisms from a variety of suppliers – and for a variety of reasons. A manufacturer of slide-out mechanisms will normally identify their respective installations by a specific name…and at times, will further define a class of installations with a 'pet name' – and at times, the coach manufacturer may get into the name game as well. This can get extremely confusing when attempting to locate service information or seeking assistance from the coachbuilder or the slide mechanism supplier!

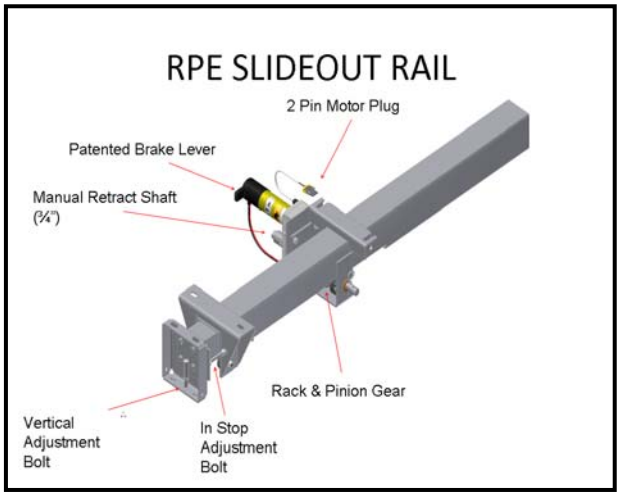
Perhaps this will help…the following is a list of Kwikee & Power Gear acronyms – i.e. Digi-Sync FLS & RPE / Low-Profile / RPM / M^2 / Dual-Acting…and a brief explanation.

Digi-Sync = The term 'Digi-Sync' was first used by Kwikee to identify their 2-arm slide-out mechanisms. This electric slide mechanism features a worm-gear or ACME screw drive and 'synchronization' of the room travel was accomplished using encoders / hall effect sensors and a control module.

FYI - With the 2007 acquisition of Kwikee by Actuant - the parent company of Power Gear, the decision was made to identify the new Power Gear 2-arm rack & pinion slide-out mechanisms as 'Digi-Sync' too… and this has caused some confusion with all parties involved.

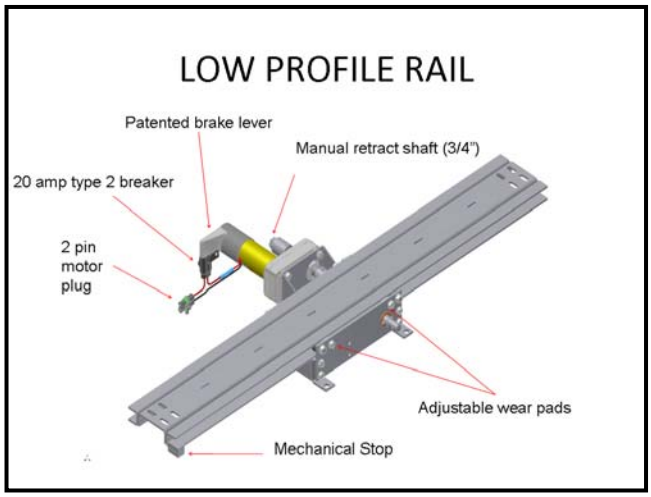
Digi-Sync FLS = **F**aster / **L**onger / **S**tronger – This identifies a change made by Kwikee beginning on MY2005 coaches. The original motor with the *replaceable* encoder changed to a more powerful motor with an integrated encoder. The room travels twice the speed of the older / standard mechanism and the stroke and weight carrying capacity were increased too.

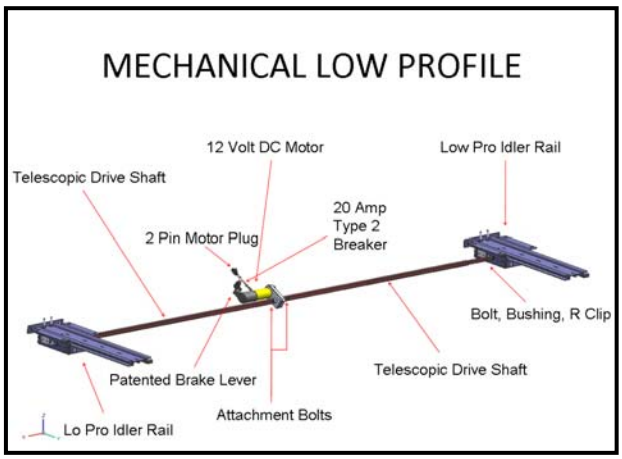




Digi-Sync RPE = **R**ack & **P**inion / **E**lectronic – This mechanism is Power Gear's variation of the original Kwikee® Digi-Sync 2-arm slide-out mechanism. A rack & pinion drive is employed versus the ACME screw drive. The synchronization process is controlled by a 'control' module or ECM.

Low-Profile Arm = This arm assembly is remindful of a 'powered' drawer-glide lying on its side. This lends to a very light-weight & compact installation. This arm can be used in a single-arm or 2-arm configuration.





RPM = **R**ack & **P**inion / **M**echanically-Synchronized – This mechanism is a 2-arm installation that's powered by a single electric motor. The motor / gearbox assembly is positioned between the two arms and a 'drive shaft' powers / actuates both arms equally. A variation exists with one arm being a powered arm assembly and the second arm being a *driven* arm.

M^2 Sync = M^2 Sync is better described as an *electronics package* versus a mechanism and is used with the Low-Profile installations. The feature that's unique to M^2 Sync is the arm assemblies do not rely on mechanical or 'hard stops' to limit the travel of the arm / room. The in-stop & out-stop positions are programmed into the control module.

Dual-Acting = This slide mechanism is a compact above-floor assembly and combines a pair of low-profile rails with a common motor. The motor drives each rail in the opposite direction nearly doubling the overall travel of a standard low-profile arm.