

LIONEL SERVICE MANUAL

NO. 736 LOCOMOTIVE

No. 736 locomotive, first made in 1950, is the magne-traction version of the earlier No. 726 and is identical with it in external appearance. The internal changes made to accomplish the conversion to magne-traction include a new frame casting designed to accommodate a permanent Alnico magnet and iron pole piece plates, non-magnetic stainless steel axles, axle bushings and sintered iron driving wheels.

Other changes intended to improve locomotive life and performance include a new collector arm assembly, a low-voltage E-Unit No. 100-25 and an improved motor No. 681-100.

As in most magne-traction locomotives the operating voltage and current consumption of the 726 locomotive are slightly higher than those of its non-magne-traction counterpart, while its tractive force is about twice as large.

SERVICE HINTS

After replacing the locomotive motor, or the driving worm gear make sure to obtain proper mesh between the worm of the motor shaft and the worm wheel. Too tight a mesh will cause binding; too shallow a mesh will result in undue wear of the worm wheel teeth.

To obtain proper mesh shim washers should be used between the motor and the mounting studs of the locomotive frame. First try .008" No. 736-25 washers (black). If these give a too tight a mesh, then substitute .006" No. 726-26 washers (nickel). If mesh is slightly tight in spots run in the locomotive for several minutes.

When replacing axles make sure they are stainless steel (non-magnetic). Ordinary steel axles will short-circuit the magnetic flux making magne-traction ineffective.

