

water, always go at a very low speed (2 to 3 miles per hour). Water any deeper than three inches above the top of the rails is likely to cause damage to the traction motors.

330 Operation of F7 Locomotives with F3, FT, or F2 Units

In many instances it may be desirable to operate combinations of FT, F2, F3 and F7 units in a locomotive. This is an acceptable practice provided gear ratios are the same, and will be entirely successful if the instructions below are followed. No change in operating technique is necessary except for the conditions listed.

Be very careful when operating F7 units in conjunction with other units. If the F7 unit is in the lead, its transition indicator may show perfectly safe loading for the F7, but remember, FT, F2, and F3 units do not have as high a tonnage rating as the F7 and the F7 transition indicator will not show an overload on trailing units. Tonnage will have to be adjusted for the unit or units with the lowest tonnage rating.

1. Manual transition must be used if all units are not equipped with automatic transition. Be sure all transition cutout switches are set either all in "automatic" or all in "manual."
2. Throttle must be reduced to No. 6 position for 2 to 3 or 3 to 2 transition when operating in manual transition position.
3. Starting trains should be done according to instructions for FT units if in locomotive consist.

Locomotive units with different gear ratios may be operated together only if a study is first made by Electro-Motive, and special instructions issued. When using dynamic brakes all units must be so equipped. If the operating cab is equipped for operation of dyn-

amic brakes when locomotive is in reverse (all F7, F3, F2 and some FT) this feature may be used.

Should it become necessary to operate with manual transition, the transition cutout switch marked "Auto-Man" located on the automatic transition panel must be set and pinned in "MAN" position. All units of the locomotive must be set the same way. If one unit of the locomotive does not have automatic transition equipment, or it is not functioning, then all other units must be set for "MAN." The automatic transition panel is the top panel on the left side of the electrical control cabinet. Change from automatic to manual transition operation should not be made when under power.