Cab-1: DIR, BELL, AUX1, then either 1, 2 or 3. Each button should be held for one full second. This sets the number of steps between stopped and full speed. Press the BELL button again to turn off the bell.

Setting Speed Steps:

32 Steps: DIR, BELL, AUX1, 1 (factory setting)

128 Steps: DIR, BELL, AUX1, 2

256 Steps: DIR, BELL, AUX1, 3

TO RESTORE TMCC FUNCTIONS:

STEP 1: Move switch on loco from RUN to PROGRAM

STEP 2: Turn on Command Base

STEP 3: Place loco on track, then turn on power to track

STEP 4: Press "ENG" then input loco ID#. Press "SET".

STEP 5: Press "ENG" then input loco ID# again.

STEP 6: Press "AUX 1", then input the reprogramming code number than corresponds to your loco (See list below).

STEP 7: Turn off power to track, wait ten seconds.

STEP 8: Remove loco from track, move switch from PROGRAM to RUN.

STEP 9: Place loco back on track. Turn power on to track.

STEP 10: Press "ENG" and ID#, then operate as normal.

REPROGRAMMING CODES

CODE -- Product & Functions

0 Steam w/ signal sounds

1 Diesel w/ signal sounds, all Legacy Steam engines

2 Diesel w/ Cab light and signal sounds, all Legacy Diesel engines

4 Steam w/ Smoke / Pioneer Zephyr, M10,000

5 Diesel w/ strobe light - GP-7, GP-9, GP-20 / CrewTalk cabooses, S1 electric, Missile Launch engines (for flashing red light)

6 Diesel w/ cab light / PB-1's, FT's, Pullmor motored F-3's, Veranda Turbine, StationSounds passenger cars, Missile launch engines (for STEADY red light)

8 All diesels w/ smoke / Scale GG-1's/BB-1 & BB-3 electric

34 6-2800 Series Hudson and Pacifics, Small K-4's, Shays.

36 Alco PA-s (new in '97), 6-18192 WP, 6-38101/8103 Texas Specials, and 6-38106 NYC F3's

60 SD-40 UP 6-18273

74 All engines w/ wireless tether including American Flyer Mikados. NOTE For J1E and Santa Fe Warhorse Hudsons see below.

75 Soo Line SD-60 (6-18232)

76 Acela

740 J1E Hudson (6-18056) & SF Warhorse Hudson (6-18062) NOTE! Both loco and tender must be on the track.

750 Conrail Dash 8 (6-18240), 1999 Centennial SD-40 (6-18585)

760 BNSF Dash-9 (6-18235)

Driver Diameter

For proper speed regulation, program the Locomotive's driver diameter into the Cruise Control system. Using a small ruler or calipers, measure the driver diameter as accurately as possible. Do not include the wheel flanges in the measurement. Your measurement should include only the part of the wheel that contacts the top of the rail. Convert the measurement to decimal inches, and program it into the engine using the CAB-1

[ENG][#][DIR][BRAKE][AUX1][***]
where *** = driver diameter in decimal inches (*.**)
For most diesel locomotives, the wheel diameter is 0.875" and is programmed as 088.

Gear Ratio

For smoother operation, program the locomotive gear ratio into the Cruise Control system. To measure the gear ratio, make a small mark on the motor flywheel with a felt tip pen. Make an additional mark on one of the driver wheels. Slowly turn the motor and count the number of revolutions that are necessary to achieve a full 360 degree rotation of the driver wheels. For example, twenty motor turns for one driver revolution will be programmed as 200. Twelve and one-half turns is programmed as 125.

[ENG][#][DIR][BOOST][AUX1][***]
where *** = gear ratio, expressed in decimal form as xx.x
Diesel locomotives commonly have a gear ratio of 22:1.

Do the following keystrokes to reset a K Line engine equipped with K line Cruise control. These keystrokes should eliminate jerkiness and intermittent speed control. The engine does not have to be in PROG to do this; do this in RUN position.

1. DIR
2. BRAKE
3. AUX 1
4. 2
5. 5
6. 0
7. DIR
8. BOOST
9. AUX 1
10. 2
11. 5
12. 0

After the completing the above key strokes, enter AUX 1 + 0 to start in neutral.

Add on from OGR Forum:

Here is the correct reset code for a Kline command engine with cruise.

Engine 99, then set, then eng 1 (or whatever you want you final ID to be) then set; then Aux1; next, this is important, 7,8. The 7 tells it that it has cruise and the 8 is Lionel's code for steam with puffing smoke. A good check for you to see if you have cruise is after you have done the reset I mentioned, turn track voltage off, pull command base plug, now using the variable speed control, speed up, and if it takes a period of time for it to start running, and when it does move, it moves super slow, you have cruise; if it takes off normally, you do not have cruise. This is where the 7 comes in. If the R2LC is not told it has cruise, it will not run in non command. It will do everything but move.

To set speed steps with Kline cruise;

Press DIR, BELL, AUX1 then (#1) for 32 steps, (#2) for 128 steps, (#3) for 256 steps. The 128 setting seems to be the smoothest.