

LP Refresher Training Course- Combined

	Modules	Duration
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73/2024	A	2024/E(Trg)/41/13 Transportation Module	6 days
	B	Technical Module	12 days
		Total	18 days

DESCRIPTION

DURATION

(A)Transportation, First Aid, Fire Fighting

6 days

Sno.	Subject	Duration in days
1.	Brief description of GR & SR. Correction slips	6 days
2.	Important definitions such as Adequate distance, Block Section, Isolation, Faulting mark, Running Line, Axle counter, Station section, etc.	
3.	Light engine, Relief Engine, Banking Engine, Train Engine, Shunting Engine, etc.	
4.	Systems of working, Ghat working/Ghat Rules Train formed from a non-TXR point , etc.	
5.	Unusual working e.g. failure of Head light, train received on Blocked line or to be started from a Non-Signal/Non running line, without brake van or without guard, with hot axles, etc.	
6.	Types of signaling systems, classification of signals. Approach and Departure signals permissive signals, subsidiary signals, automatic signal, semi-automatic signal, etc.	
7.	Defective signals and authority to pass.	
8.	Various authorities used during train operation & shunting	
9.	Duties of in case of accident, Mid Section derailments, protection of block section in case of accidents/incapacitation, Use of detonators, etc.	
10.	Duties in case of fire in train/loco.	
11.	Identifying and handling of various types of fire extinguishers, precautions to be taken while extinguishing fire, Render first aid to the burn injuries, first aid to persons affected by suffocation, communication, etc.	

(B)LP Refresher Training Course– Combined

Course Code - PRM

Module no.	Training Content	Duration in days
PRM-1	Loco module	4
PRM-2	Driving Module	1

PRM-3	Loco Pneumatic Module (electric & diesel locos)	1
PRM-4	Loco Operation Module	1
PRM-5	Safety Module	1
PRM-6	TrD Module	1/2
PRM-7	C&W Module	1/2
PRM-8	Simulator Training	1 1/2
PRM-9	Case Studies	1
PRM-10	Assessment and Grading	1/2
	Total days	12

Note :

1. This course is deemed to refresh the technical learning of an LP in both Electric as well as Diesel Traction i.e. the trade(s) he is trained and competent in. If Zonal Railways feel the need of dedicated course for single traction, they may tweak only the content of modules, suitably, for LPs trained in single traction only, with the permission of PCEE.
2. **Any dual trained LP must attend this course only**, upon which his learning in both traction – Diesel and Electric shall be deemed to be refreshed.

PRM-1

DESCRIPTION
Loco Module
including important modifications in
locomotive

DURATION
4 days

CONTENT

Sno.	Subject	Duration in days
1.	Discussion on problems faced by LPs during train working	4 days
2.	Summarizing of general description of Three phase & conventional electric locomotives (including microprocessor & SIV based locos, WAG12 etc)	
3.	Summarizing of general description of all types of diesel locomotives (HHP & Microprocessor loco)	
4.	Summarizing of locations of safety & important equipment on electric & diesel locomotives (incl. WAG12, WDG4G/6Getc).	
5.	Summarizing of location and functions of various types of relays, switches, MCBs, fuses, and other electrical equipment, along with their normal positions, need to be regularly checked and operated during train operations - use of audio-visual content is recommended.	
6.	Description of latest modifications and changes in electric & diesel locomotives and their requirement, actions by crew etc..	

PRM-2

DESCRIPTION
Driving Module

DURATION
1 day

CONTENT

Sno.	Subject	Duration in days
1.	Proper call out of signal with LP. Demonstration of procedure of call out signal as per instructions laid down.	1 day
2.	Precautions while attaching locomotive on load	
3.	Train starting/stopping without jerk and gradual acceleration & deacceleration	
4.	Tips to avoid train parting, wheel slip, wheel skidding, rail burn etc.	
5.	<ul style="list-style-type: none"> Keep watch on alertness of ALP. Sharp lookout on signal, track, OHE & adjacent line, Tress passers etc 	
6.	Procedure of passing neutral section <ul style="list-style-type: none"> Description & usage of neutral section related boards (500 meter board, 250 meter board, DJ open board, DJ close board). 	

Sno.	Subject	Duration in days
	2024/E(Trg)/41/13	
7.	<ul style="list-style-type: none"> Precaution to be taken before neutral section. Looking back in curves for smooth running of train i.e. abnormal sound, hanging part, smoke, etc. 	
8.	Procedure of MU loco operation, cab changing in MU loco, dead attaching of loco, stabling of locomotives, etc.	
9.	Description of dynamic/regenerative braking procedure and its benefits.	
10.	Summarizing the duties defined in ACTM	
11.	Good driving techniques	
12.	Train controlling in different terrain.	

PRM-3

DESCRIPTION
Loco Pneumatic Module

DURATION
1 day

CONTENT

Sno.	Subject	Duration in days
1.	Summarizing of braking system of electric & diesel locomotives	1 day
2.	Action to be taken in case of MR, BP, FP pressure not build up/not maintaining	
3.	Miscellaneous failures of air brake of locomotive	
4.	Pneumatically isolation of bogie	
5.	Releasing of parking/hand brake in case of brake binding in locomotive	
6.	Operation of PTDC in three phase locomotive	
7.	Location of air dryer and isolating procedure	
8.	Actions to be taken in case of BP/ FP angle cock broken/Hose pipe damaged due to CRO	
9.	Application/releasing of parking/hand brake, of locomotives and related failures & troubleshooting	
10.	Procedure of various tests & checks related to loco brake system like CP efficiency test, BP & FP leak test, train leak test, Loco brake power test, etc.	
11.	Miscellaneous failure related to brake system & troubleshooting	

DESCRIPTION
Loco Operation Module

DURATION
1 day

CONTENT

Sno.	Subject	Duration in days
1.	Discussion on various common defects in electric & diesel locomotives (incl. WAG12 etc)	1 day
2.	Reading of Troubleshooting directories of electric & diesel locomotives (incl. WAG12 etc), fault acknowledgment, actions as per TSD.	
3.	Precautions to be followed in case of any equipment of loco is isolated (as per TSD).	
4.	Isolation procedure for isolating various equipment.	
5.	Operation of PTDC in three phase locomotive.	
6.	Wedging of relays & contactors in conventional locomotives.	
7.	Miscellaneous failures of locomotive	
8.	Correction in TSD	
9.	Discussion on various tests conducted on locos	
10.	Application/releasing of parking/hand brake of locomotives and related failures & troubleshooting	
11.	Procedure of MU loco operation, cab changing in MU loco, stabling of locomotives, etc.	
12.	Grounding & un-grounding of locomotive	
13.	Summarizing the duties defined in ACTM like Cleanliness of Loco, ALP shall assist the LP, appearance and proper uniform, duty assigned to him by the LP/CC/Sr.CC, maintaining a log of times and detentions enroute, etc.	
14.	Actions to be taken in case VCD act on line.	
15.	Action to be taken in case of OHE tripped during dynamic / regenerative braking.	
16.	Application/releasing of parking/hand brake of locomotives and related failures & troubleshooting	
17.	Procedure of attaching dead locomotive in train.	
18.	BPEMS switch and its usage.	
19.	How to stop train on level, gradient, Controlling of train & coasting, energy conservation etc.	

DESCRIPTION
Safety Module

DURATION
1 day

CONTENT

Sno.	Subject	Duration in days
1.	Action to taken in case train / loco stalled on gradient.	1 day
2.	Actions to be taken to avoid rolling down/rolling back of train/loco.	
3.	Action to be taken in case of train parting	
4.	Action to be taken in case flat wheel is detected	
5.	Derailment, collision, fire etc	
6.	Train protection and opposite line protection	
7.	OHE hanging / OHE breakdown	
8.	Axle seizure / hot axle	
9.	Smoke from underslung equipment	
10.	During water on track or flood	
11.	Obstructed track / land slide	
12.	Train operation during fog/poor visibility	
13.	In case of train parting	
14.	Flasher light of opposite train glowing	
15.	Panto entanglement and securing of broken pantograph & isolation of pantograph (through HPT link on loco roof)	
16.	In case of loco entered in unwired territory	
17.	Cattle Run Over (CRO) & inspection of loco after CRO	
18.	Stabling of locomotives & securing of train/loco to avoid rolling down/rolling back.	
19.	Communicating to TLC/TPC/Section controller or other official regarding information of any abnormality and assistance required (protocol to be followed like train no., loco no., section, between stations, km no., nature of abnormality, assistance required, etc.)	

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DESCRIPTION
TrD Module**DURATION**
½ day**CONTENT**

Sno.	Subject	Duration in days
1.	Brief Knowledge of TrD • Brief overview of OHE system • Familiarization with OHE equipment for identification (including cantilever assembly)	½ day
2.	Procedure of passing neutral section • Description & usage of neutral section related boards (500 meter board, 250 meter board, DJ open board, DJ close board). • Precaution to be taken before & after neutral section.	
3.	Provision of Sigma Board & usage.	
4.	Communication with TPC/TLC in case of panto broken or OHE hanging.	
5.	Action to be taken in case of panto broken/entangled.	
6.	Roof inspection & isolation of pantograph from HPT link and securing of broken panto, etc.	
7.	Duties of during OHE Break Down.	

PRM-7

DESCRIPTION
C&W Module**DURATION**
½ day**CONTENT**

Sno.	Subject	Duration in days
1.	Different types of Rolling stock - Nomenclature	½ day
2.	Summarization of air brake system of coaches, wagons; BMBS and APS, etc and Hand brake in rolling stock.	
3.	Alarm chain pulling - resetting & isolation, FIBA, Fire Detection (VESDA), etc	
4.	Continuity test, cases of brake binding and releasing, Flat tire detection and action to be taken, isolation of distributor valve, etc	
5.	Guard & Loco Pilot check - clearance from road side station/sidings/non-TXR points & brake power calculation	
6.	Duties in case of fire in train	
7.	Summarizing of type of Brake power certificates, percentage of brake power required in goods/mixed/passenger trains, etc.	
8.	Overview of EMU/MEMU, Vande-Bharat type train set, Push-Pull, etc.	

PRM -8

DESCRIPTION
Simulator Training**DURATION**
1½ days

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CONTENT

Sno.	Subject	Duration in days
1.	Simulator training for developing good driving techniques on different terrain.	1½ days
2.	Troubleshooting practice in tripping car with the help of (in-built/external TSD.	

PRM-9

DESCRIPTION

Cases Studies of various accidents

DURATION

1 days

CONTENT

Sno.	Subject	Duration in days
1.	Case Studies of various accidents and lessons. (Particularly focusing on scenarios where prompt actions by LP/ALPs could have averted the incidents or accidents.)	1 day

PRM-10

DESCRIPTION

Assessment and Grading

DURATION

½ day

CONTENT

Sno.	Subject	Duration in days
1.	Assessment and grading of trainees for judging training performance. There shall NOT be any pass/fail criteria upon assessment.	½ day

Instruction for Training centers & Instructors (Technical Module)

- The above content is for technical training only. Candidate/trainee would also need to undergo requisite Traffic Transportation training.
- This course shall be applicable to all LPs and is deemed to refresh the learning of both the tractions.
- Classroom training to have audio-visual aids with digital content.
- Deep knowledge of circuits (electrical or pneumatic), etc is not required.

2024/E(Trg)/41/13

- Training should primarily emphasize on driving skills, requirements of rules / regulations / discipline in day to day operation.
- During subject-specific classroom training, it is essential to emphasize discussions on safety cases, including SPAD, accidents, derailments, collisions, side collisions, and incidents involving entering unwired/sand humps. This emphasis should highlight how adherence to proper procedures or correct actions by the LP on the subject could have effectively prevented such cases.
- Furthermore, any outstanding topics relevant to the assigned duties should be integrated into the training curriculum as necessary.
- There shall **NOT** be any pass/fail criteria in the refresher course.
