

## Get ready!

1 Before you read the passage, talk about these questions.

- 1 What are some different types of railway turnouts?
- 2 Why is it important to understand the differences between types of turnouts?

## The Revised Railman's Guide

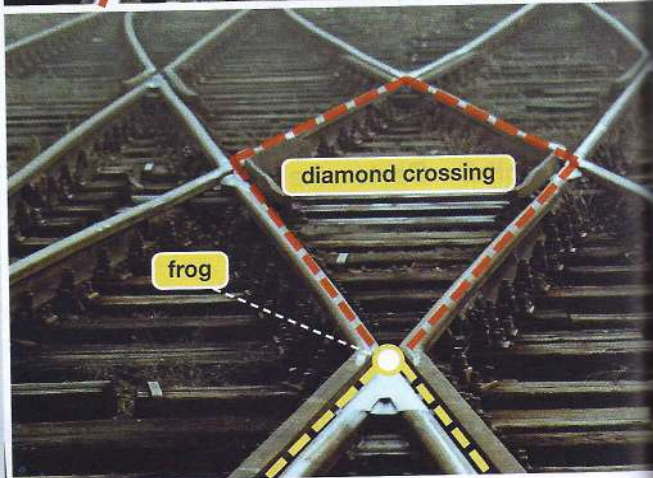
## Chapter 5: Turnouts and other Junctions

**Turnouts**, also called **switches** or **points**, are very important in railroads. You must understand the function of different types of switches. Otherwise, you could cause a derailment or collision. Turnouts allow trains to change routes. All turnouts have a **crossing**, or **frog**, to facilitate switching. Other junctions, such as **diamond crossings**, require frogs as well. Modern frogs are usually cast from manganese steel. Some are still assembled from multiple pieces.

Different turnouts serve different purposes. Standard turnouts allow trains to move to parallel tracks. **Left hand turnouts** facilitate movement to parallel tracks to the left. **Y turnouts** and **3-way turnouts** appear where train lines diverge. **Single slips** and **double slips** allow switching at a junction. In a single slip, only trains on one track can switch. Pay close attention at single slips. Along main train lines there are safety mechanisms. **Trap points** and catch points are common safety features. They prevent disastrous collisions and unauthorized entry.

single slip

3-way turnout



## Vocabulary

3 Match the words or phrases (1-8) with the definitions (A-H).

- |                  |                        |
|------------------|------------------------|
| 1 __ turnout     | 5 __ double slip       |
| 2 __ frog        | 6 __ diamond crossing  |
| 3 __ single slip | 7 __ 3-way turnout     |
| 4 __ trap point  | 8 __ left hand turnout |

- A a special piece of track that facilitates crossing  
 B an installation that allows trains to move between tracks  
 C a junction that allows trains on one track to switch  
 D a safety feature that prevents access to the main track  
 E a turnout that lets trains merge to the left  
 F a junction that allows trains on both tracks to switch  
 G a turnout that lets trains move left, right, or straight  
 H a junction at which two tracks cross

## Reading

2 Read the Railman's guide. Then, mark the following statements as true (T) or false (F).

- 1 \_\_ Every point on a line will have a frog.
- 2 \_\_ Y turnouts facilitate switching at a diamond crossing.
- 3 \_\_ 3-way turnouts are used where different routes diverge.



**4** Read the sentences and choose the correct words or phrases.

- 1 A **crossing** / **trap point** is the point where two rails meet.
- 2 The train can go right or left at the **left hand turnout** / **Y turnout**.
- 3 Another word for a turnout is a **frog** / **switch**.
- 4 A railway **point** / **double slip** allows trains to move to another track.

**5** Listen and read the Railman's guide again. Why are trap points important in railroads?

## Listening

**6** Listen to a conversation between two railroad planners. Mark the following statements as true (T) or false (F).

- 1 ☐ Multiple train lines must switch at the intersection.
- 2 ☐ The woman doubts a single slip can meet the intersection's needs.
- 3 ☐ The man thinks it's best to install a double slip.

**7** Listen again and complete the conversation.

Planner 1: Hey, are you ready to 1 \_\_\_\_\_ at those plans?

Planner 2: Yeah, I'm ready. We just have to 2 \_\_\_\_\_ this last intersection.

Planner 1: Okay, I think I remember. We're going to install a 3 \_\_\_\_\_, right?

Planner 2: That's what we were talking about. But I'm not sure if that's the best option.

Planner 1: Well, we want to 4 \_\_\_\_\_.

Planner 2: That's true, but right now only three lines go to that intersection.

Planner 1: I guess you're right. And the 226 is the only route that needs to switch.

Planner 2: 5 \_\_\_\_\_.  
A single slip is our best bet.

Planner 1: Hmm. You may be right. A double slip is more complicated.

Planner 2: Yes, it is more flexible, but we 6 \_\_\_\_\_.

Planner 1: Yeah, I agree. Better to keep it simple.

## Speaking

**8** With a partner, act out the roles below based on Task 7. Then, switch roles.

**USE LANGUAGE SUCH AS:**

*We're going to install a ...*

*But I'm not sure if ...*

*Here's what I think ...*

**Student A:** You are a railroad planner. Talk to Student B about:

- what turnout to use at an intersection
- why a kind of turnout is not suitable
- what turnout you think is best

**Student B:** You are a railroad planner. Talk to Student A about different turnouts for an intersection.

## Writing

**9** Use the conversation from Task 8 to complete the development notes for the intersection.

**Littleton RR**

## Development Notes Intersection G

Planner Name and Date: \_\_\_\_\_

Type of turnout: \_\_\_\_\_

Describe how the intersection will function:

---

---

---

---

---