

# PENNSYLVANIA SYSTEM

## Locomotive and Tender Maintenance Instructions No. 31

ISSUED ALTOONA, PA.  
JULY 8, 1920.

### APPLICATION OF "D" COUPLERS TO EXISTING LOCOMOTIVES AND TENDERS (SUPERSEDING LOCOMOTIVE MAINTENANCE INSTRUCTIONS NOS. L-1-A AND L-1-I FOR APPLICATION OF COUPLERS TO LOCOMOTIVES AND TENDERS SPECIFIED HEREIN.)

In order to overcome the difficulty being experienced with ordinary type couplers on existing locomotives and tenders, such as couplers rapidly getting out of gauge and frequent breakages of the coupler heads, it has been decided to apply the "D" coupler in repairs to locomotives and tenders herein specified that are now equipped with ordinary type couplers.

#### APPLICATION TO TENDERS

Tenders of the following types: 3,600, 4,500 and 6,000 gallon straight wooden frame tenders, also 5,500, 6,000 and 7,000 gallon sloping and straight tenders having old style back end end arrangement and which are equipped with 5"x7" shank ordinary type couplers as shown on obsolete tracing 38001-B, when requiring coupler renewals shall have the 5"x7" shank "D" coupler as shown on tracing 64656-A applied after existing stocks of 5"x7" shank ordinary type couplers become exhausted. Application of this coupler will not involve any change in the existing construction of the tenders.

#### APPLICATION TO LOCOMOTIVES

Existing locomotives of the following classes: E2, E2A, E2B, E2C, E2D, E2SD, E3, E3A, E3SA, E3SD, E5S, E6S, E7S, E7SA, K2, K2S, K2SA, K2SB, K3S, K4S and G5S, equipped with 6"x6" shank pivoted head couplers as shown on obsolete tracing 37805-G, shall be repaired as follows:

**First.** When pivoted head coupler requires renewal, apply the 6"x6" shank pivoted head "D" coupler shown on tracing 64329-A.

**Second.** When pivoted coupler bracket requires renewal apply the following new parts:

Pivoted Coupler Bracket X-13975.....	Tracing 53964-A
Pivoted Head, 6"x8" Shank, "D" Coupler .....	Tracing 64330-A
Upper Adjusting Liner X-13141.....	Tracing 48043-E
Lower Adjusting Liner X-13142.....	Tracing 48044-C
3" Pivot Pin .....	Tracing 48042-B

Existing locomotives of the following classes: A5S, B6, B6S, B6A, B6SA, B6SB, B8, H6, H6A, H6SA, H6B, H6SB, H8, H8S, H8A, H8SA, H8B, H8SB, H8C, H8SC, H9S, H10S, HC-1S, L-1S and I-1S, equipped with 6"x6" shank pivoted head couplers, as per obsolete tracing 37805-G shall be repaired as follows:

**First.** When pivoted head coupler requires renewal apply the 6"x6" shank pivoted head "D" coupler shown on tracing 64329-A.

**Second.** When pivoted coupler bracket requires renewal apply the following new parts:

Pivoted Coupler Bracket X-13140.....	Tracing 48040-D
Pivoted Head, 6"x8" Shank, "D" Coupler.....	Tracing 64330-A
Upper Adjusting Liner X-13141.....	Tracing 48043-E
Lower Adjusting Liner X-13142.....	Tracing 48044-C
3" Pivot Pin .....	Tracing 48042-B

#### EXTENSION OF AIR AND SIGNAL LINE

All classes of locomotives having the 6"x6" or 6"x8" shank "D" coupler applied as specified herein shall have the air, signal and steam pipes extended. This extension involves the use of clamps as shown on the following tracings:

57237-A—Air and Signal Pipe Clamp on Pilot Beam.

57238-A—Air and Steam Pipe Clamp on Pilot Beam.

#### COUPLER RELEASE ROD

All classes of locomotives having the 6"x8" shank "D" coupler applied as specified herein shall have the coupler release rod as shown on tracing 50704-J applied.

#### DISPOSITION OF MATERIAL

Couplers, liners, pivot pins and release rods removed from locomotives in accordance with above instructions and in good condition shall be held in stock for repairs to other locomotives. It will be understood that no more new couplers of the ordinary type as shown on obsolete tracings 38001-B or 37805-G will be ordered for repairs to locomotives and tenders specified herein. Reclaimed couplers of these types, however, may be used up in repair work.

**J. T. WALLIS,**

*Chief of Motive Power.*