# Technical Bulletin

Bulletin No.: TCH-008-012 Effective Date: 5/31/94 Cancels: PRO-08-12 dated 3/1/91 Page: 1 of 5

Subject: Air Dryer Installations – European Vehicles W/
Compressor Discharge Line Unloader System

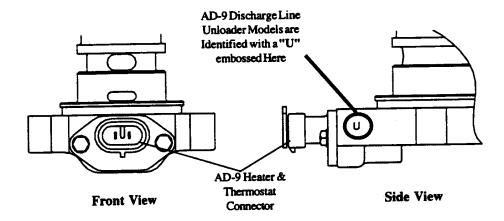
Attachments: Schematics for AD-2, AD-4 & AD-9

## THIS BULLETIN CONTAINS REVISED INFORMATION AND SUPERSEDES ALL PREVIOUS BULLETINS ON THE SAME SUBJECT!

The Bendix AD-2, AD-4, and AD-9 DLU (Discharge Line Unloader) Air Dryers **CAN** be installed on European and other overseas vehicles that utilize a Discharge Line Unloader Valve instead of the domestic type Governor and compressor Unloader mechanism.

#### **IMPORTANT**

- AD-2 <u>Any AD-2 Air Dryer part number</u> may be used in the attached AD-2 installation schematic.
- AD-4 Any AD-4 Air Dryer part number may be used in the attached AD-4 installation schematic.
- AD-9 Only part numbers 065499 (12v heater) and 065605 (24v heater) may be used in the attached AD-9 DLU installation schematic. These part numbers were released in 1994 for this specific purpose. Only these AD-9 DLU part numbers may be used for this installation. They are identified with the letter "U" embossed in the metal on the flat area next to the heater and thermostat connector and with a metal identification tag installed under one of the end cover nuts.



The discharge line unloader valve which is generally located just ahead of the first reservoir (the "wet tank"), must be removed. An air dryer and D-2 governor can then be installed per our instruction and they will perform the compressor unloading function formerly provided by the discharge line unloader valve.

Attached are partial schematics detailing the piping of the air dryer and governor combination along with the metric fittings required to complete the installation. Installing the air dryer and governor on a single mounting plate allows the use of U.S. fittings and tubing for the control and sensing lines for the governor and air dryer. Only two Metric fittings (if any) are required to install the air dryer in the compressor discharge line. The fittings shown on the attached schematics would allow Metric air lines to be connected to devices with U.S. pipe threads. On some overseas vehicles U.S. tubing sizes are used but the fittings have Metric pipe threads. Mack Midliners (MS-20) are examples of this. In this case the fittings needed to install the air dryer and governor combination can be standard U.S. fittings since the discharge line is 5/8" O.D. tubing and the pipe threads in the AIR DRYER are U.S.

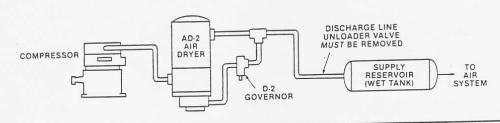
Metric fittings are not currently available from T.B.S. however several of the large fittings manufacturers have complete catalogs and listings along with conversion fittings.

# Typical Discharge Line Unloader System Without an AD-2 Air Dryer Installed

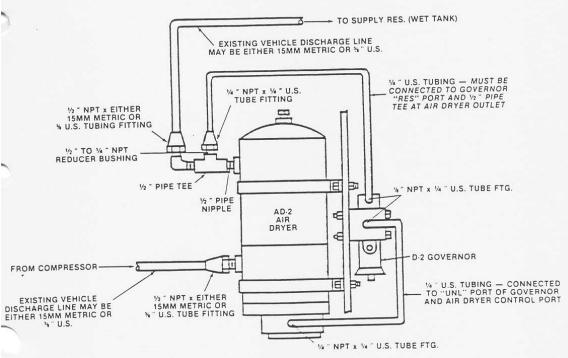
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## Typical AD-2 Air Dryer System With Discharge Line Unloader Valve Removed

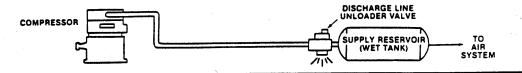


## AD-2 Air Dryer Piping Details

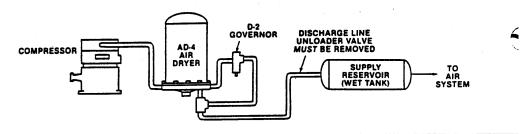


IMPORTANT
THE DISCHARGE LINE UNLOADER VALVE MUST
BE REMOVED FOR AIR DRYER TO FUNCTION PROPERLY.

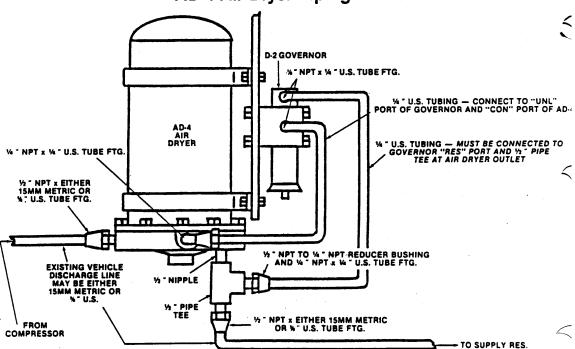
# Typical Discharge Line Unloader Valve System Without an AD-4 Air Dryer Installed



# Typical AD-4 Air Dryer System With Discharge Line Unloader Valve Removed

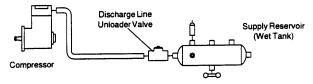


#### **AD-4 Air Dryer Piping Details**

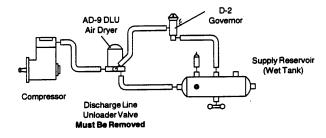


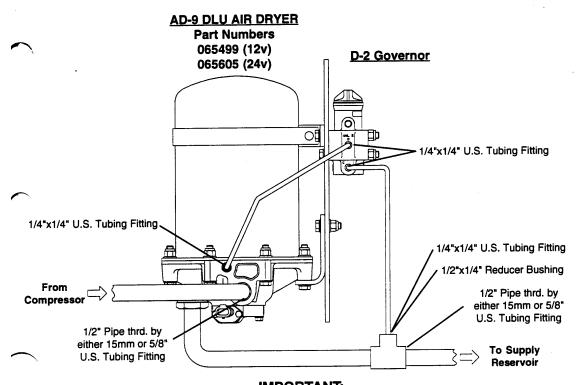
# IMPORTANT THE DISCHARGE LINE UNLOADER VALVE MUST BE REMOVED FOR AIR DRYER TO FUNCTION PROPERLY.

### Typical Discharge Line Unloader System Without An Air Dryer



### Typical AD-9 DLU Air Dryer System With Discharge Line Unloader Valve Removed





## IMPORTANT:

The Discharge Line Unloader Valve must be removed for the AD-9 DLU Air Dryer to function properly.

