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Supersedes 8/2025

RDS SENSOR REPLACEMENT KIT

INSTALLATION INSTRUCTIONS FOR RDS SENSOR KIT USED ON LC/LG/LH/LD/SC/SG/SH/SD 024-360 PACKAGED UNITS - WITH R454B

Shipping and Packing List

Package 1 of 1 contains:

1- RDS Sensor

⚠WARNING

To prevent serious injury or death:

1. **Lock-out/tag-out before performing maintenance.**
2. **If system power is required (e.g., smoke detector maintenance), disable power to blower, remove fan belt where applicable, and ensure all controllers and thermostats are set to the "OFF" position before performing maintenance.**
3. **Always keep hands, hair, clothing, jewelry, tools, etc., away from moving parts.**

Check packaging for shipping damage. Contact the last carrier immediately if any shipping damage is found.

Application

Units are equipped with factory-installed RDS Sensors located on different points on the unit. The RDS sensors provide the Unit Controller with continuous readings for leaked refrigerant concentration levels and sensor health status (Good or Fault). These readings are used to modify unit operation to disperse the leaked refrigerant and to remove possible ignition sources. In addition, the Unit Controller uses these readings to initiate alarms to alert the operator of a refrigerant leak or faulty sensor(s).

Each sensor must be specifically placed for proper unit operation and to initiate valid alarms. See TABLE 1 for a list of alarms to decide which sensor needs to be replaced. See TABLE 2 or TABLE 3 to determine sensor location based on unit.

TABLE 1 - Alarms

Alarm	Alarm description	RDS Sensor Location
257	Refrigerant leak sensor fault in the Indoor section (sensor #1)	Indoor compartment
258	Refrigerant leak sensor fault in the control panel/compressor section (sensor #2)	"Control/Compressor or Compressor compartment"

TABLE 2 - Indoor Compartment - Alarm 257

Unit Model	Figure
LC/LG/LH/LD 024-074 SG/SD/SC/SH 036-060	FIGURE 1
LC/LG/LH/LD 078-152 (TUBE AND FIN)	FIGURE 2
LC/LG/LH/LD 078-152 (MICROCHANNEL)	FIGURE 3
SG/SD/SC/SH 092-120	FIGURE 4
LC/LG/LH/LD 156-360 SG/SD/SC/SH 180-240	FIGURE 5

TABLE 3 - Control/Compressor Compartment - Alarm 258

Unit Model	Figure
LG/LD 024-074	FIGURE 6
SG/SD 036, 060	FIGURE 7
SG/SD 092-120	FIGURE 8
LD/LH 156-302	FIGURE 9
LC/LG 156-360 SG/SD/SC/SH 180-240	FIGURE 10

R454B

LC/LG/LH/LD 024-074, SG/SC/SH/SD 036-060
INDOOR COMPARTMENT RDS SENSOR

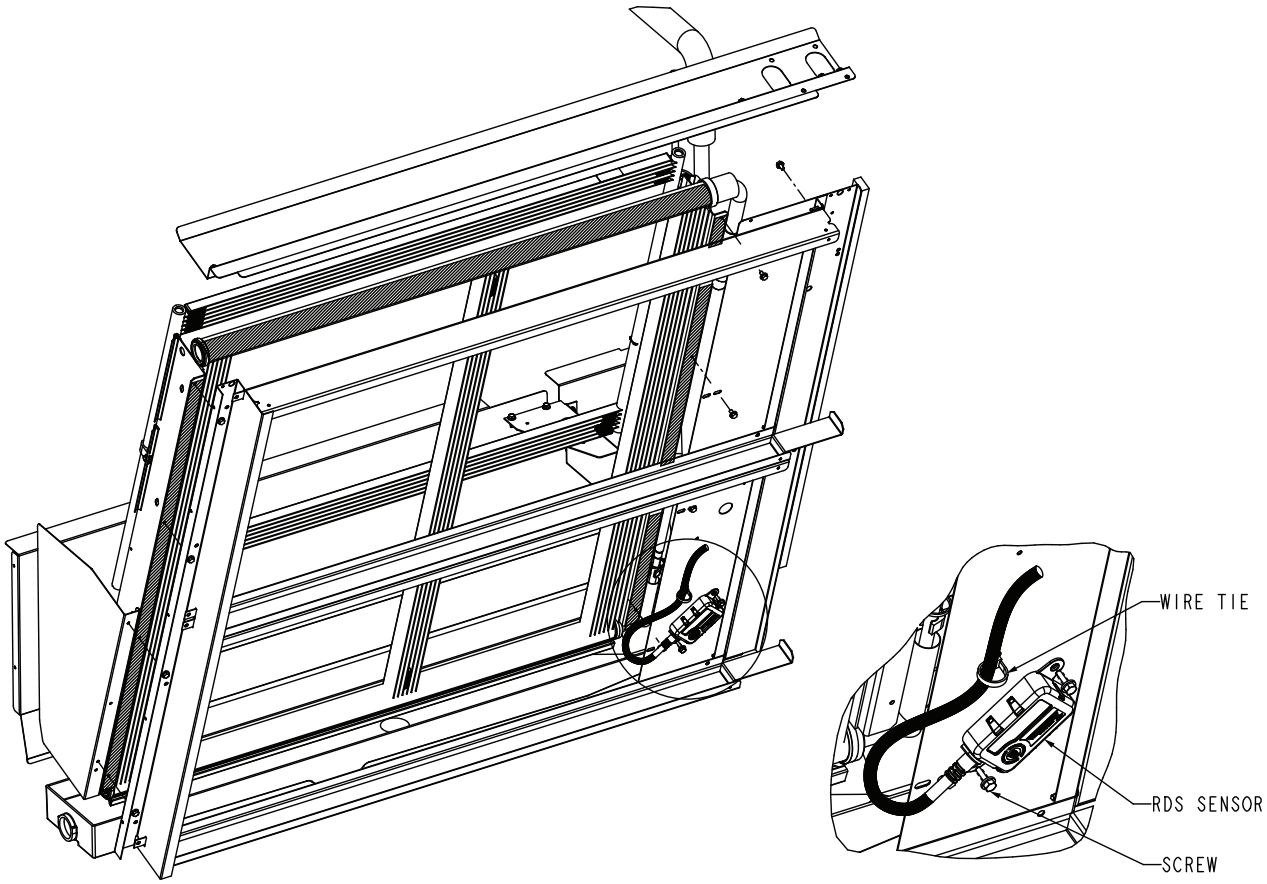


FIGURE 1

LC/LG/LH/LD 078-152 (WITH TUBE AND FIN)
INDOOR COMPARTMENT RDS SENSOR

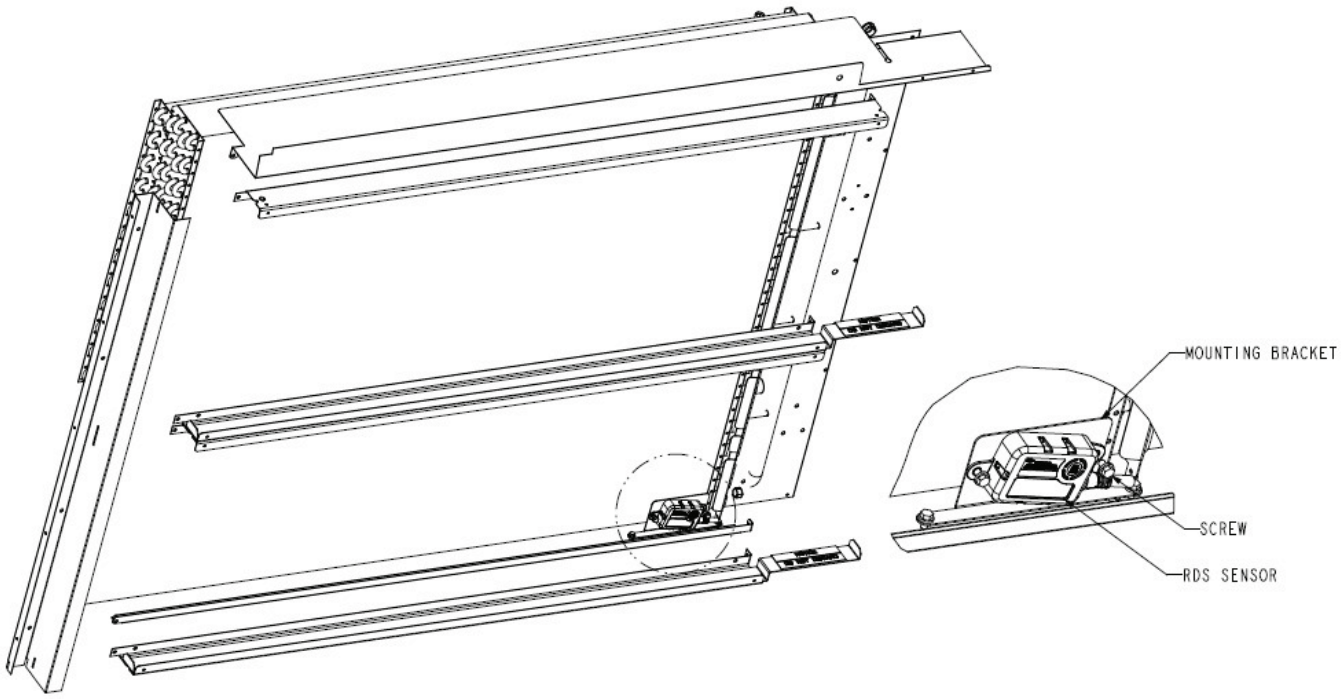


FIGURE 2

LC/LG 078-150 WITH MICROCHANNEL
INDOOR COMPARTMENT RDS SENSOR

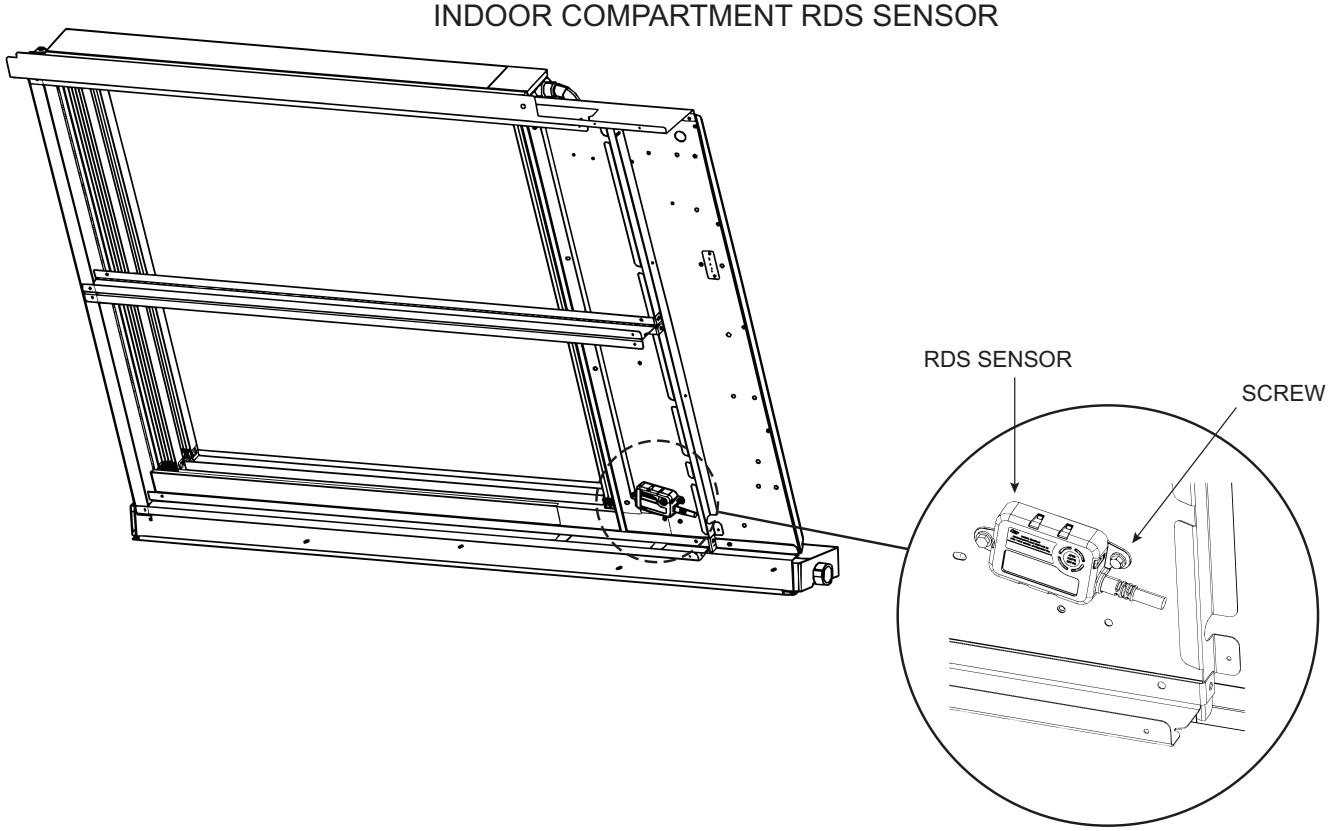


FIGURE 3

SG/SC/SH/SD 092-120
INDOOR COMPARTMENT RDS SENSOR

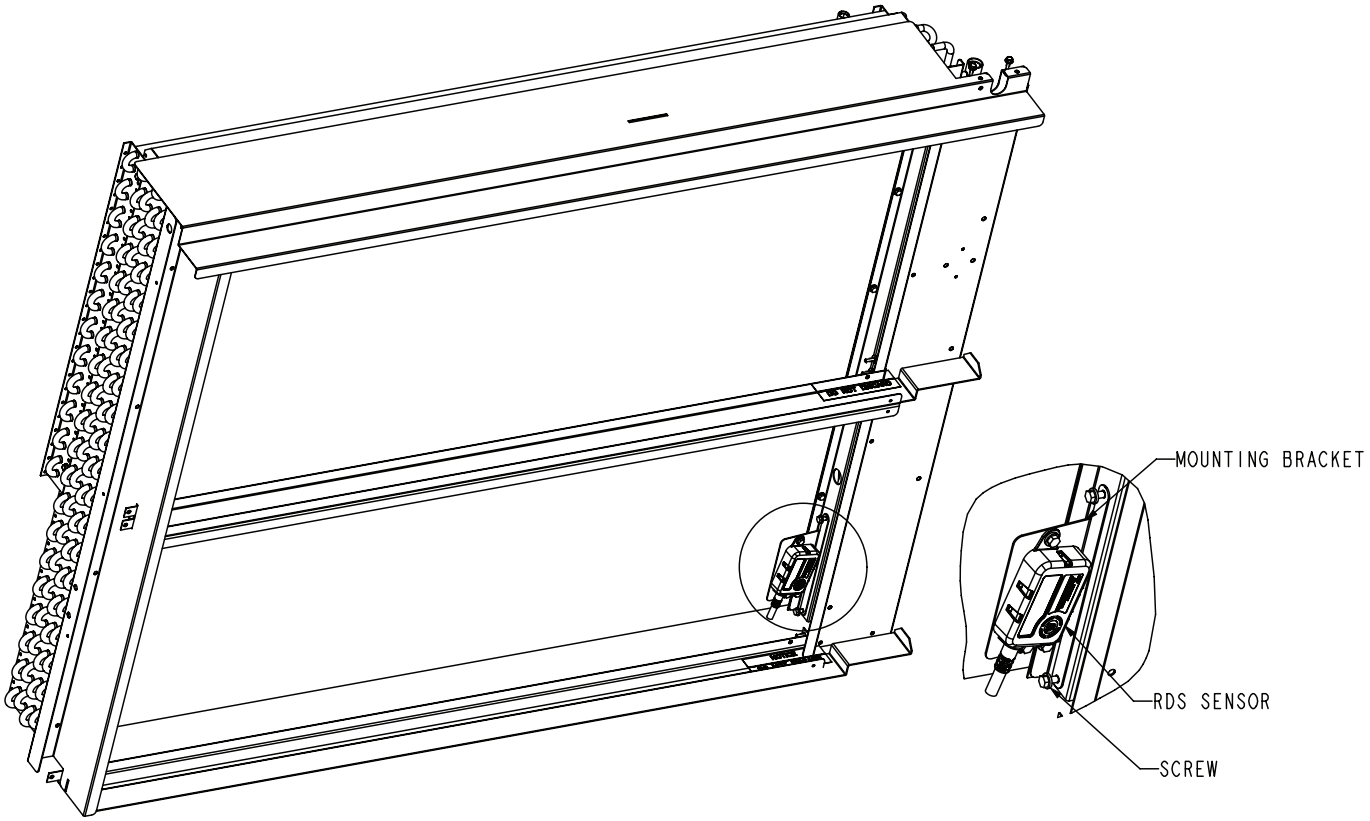


FIGURE 4

LC/LG/LH/LD 156-360, SG/SC/SH/SD 180-240
INDOOR COMPARTMENT RDS SENSOR

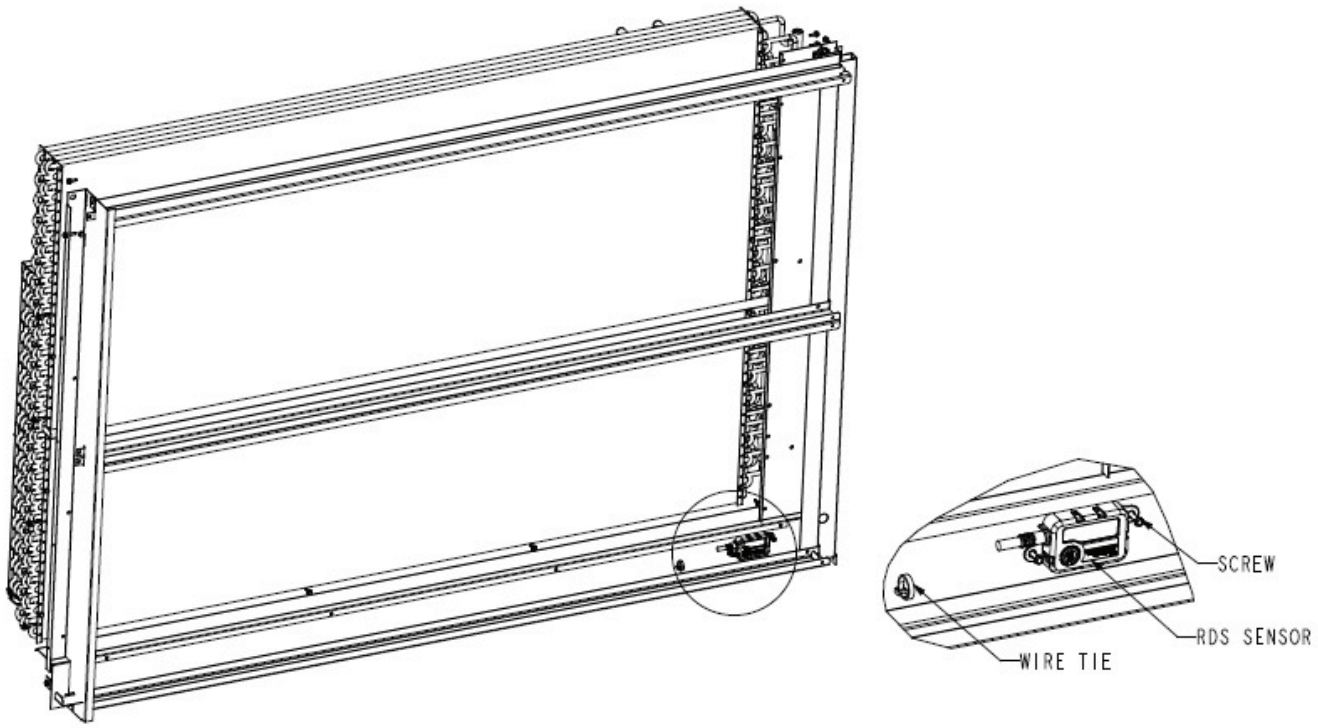


FIGURE 5

LG/LD 024-074
COMPRESSOR RDS SENSOR

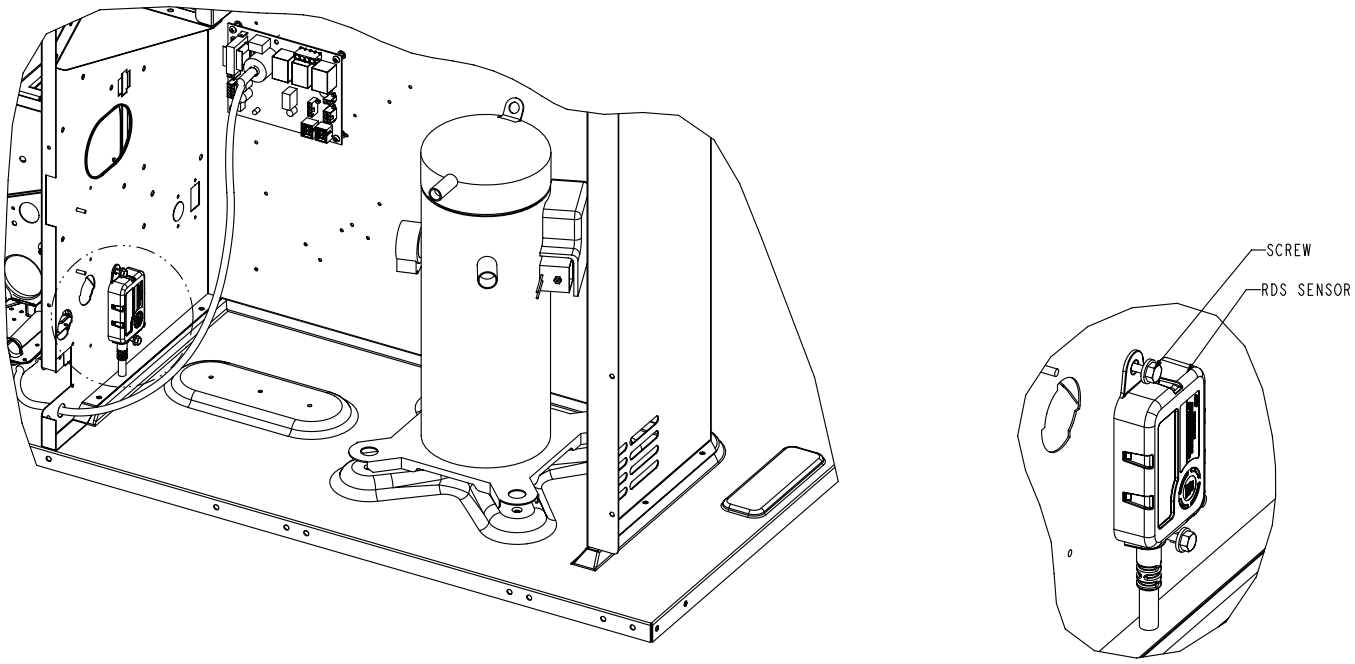


FIGURE 6

SG/SD 036, 060
COMPRESSOR RDS SENSOR

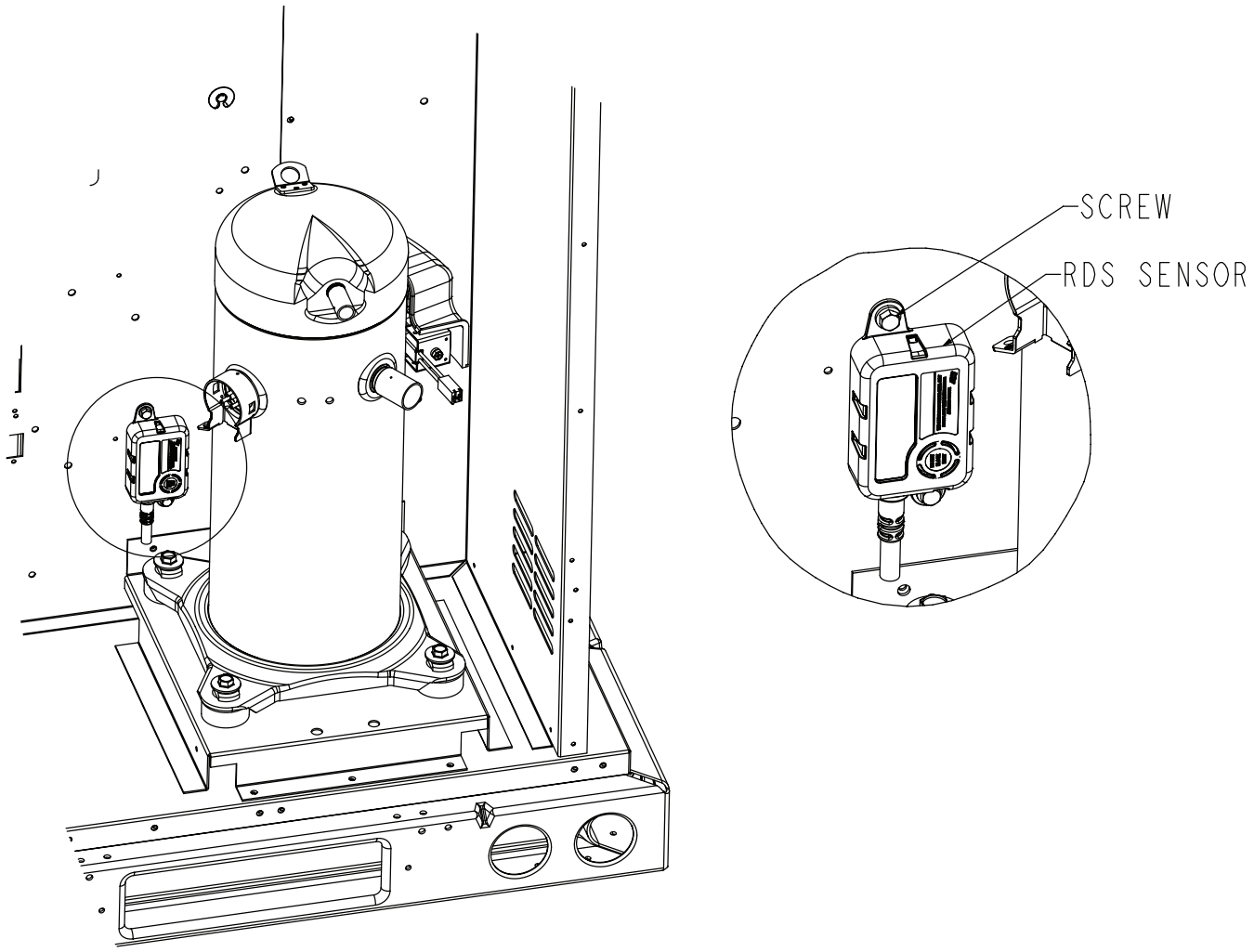
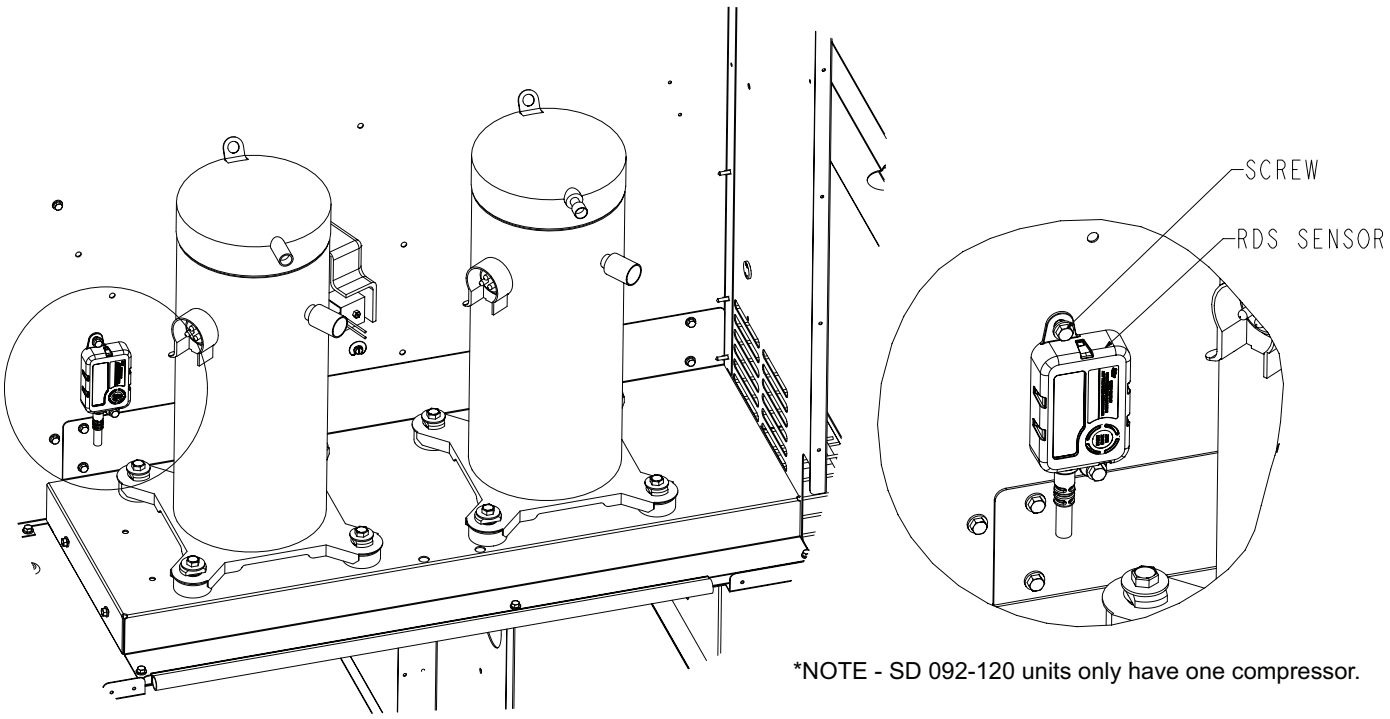


FIGURE 7

SG/SD* 092-120
COMPRESSOR RDS SENSOR



*NOTE - SD 092-120 units only have one compressor.

FIGURE 8

LD/LH 156-302
COMPRESSOR RDS SENSOR

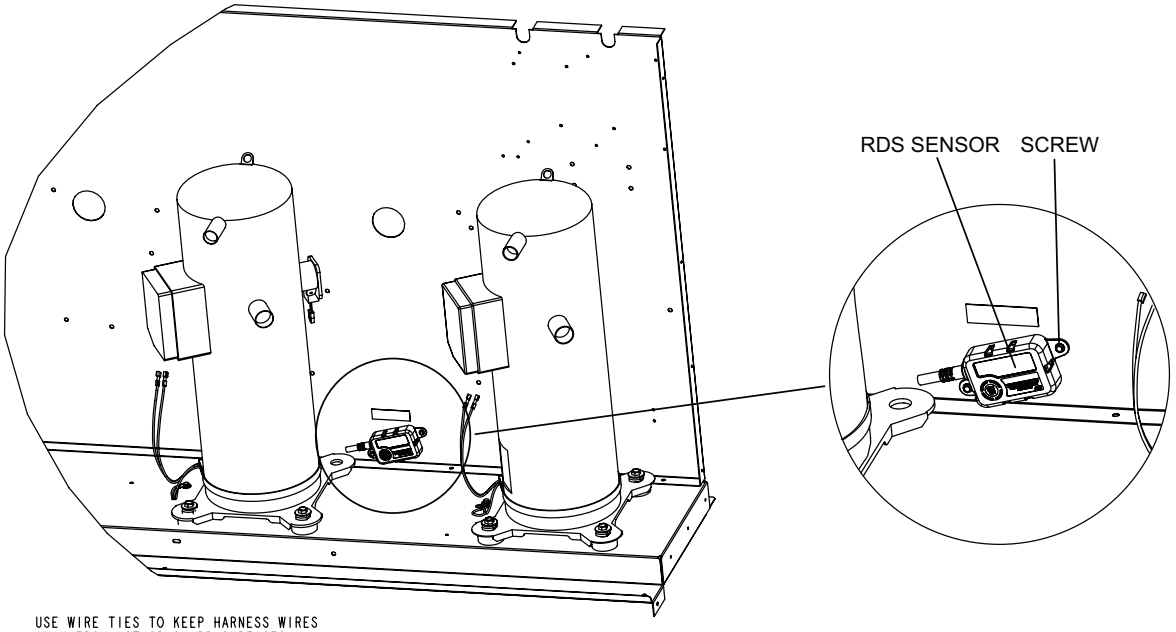
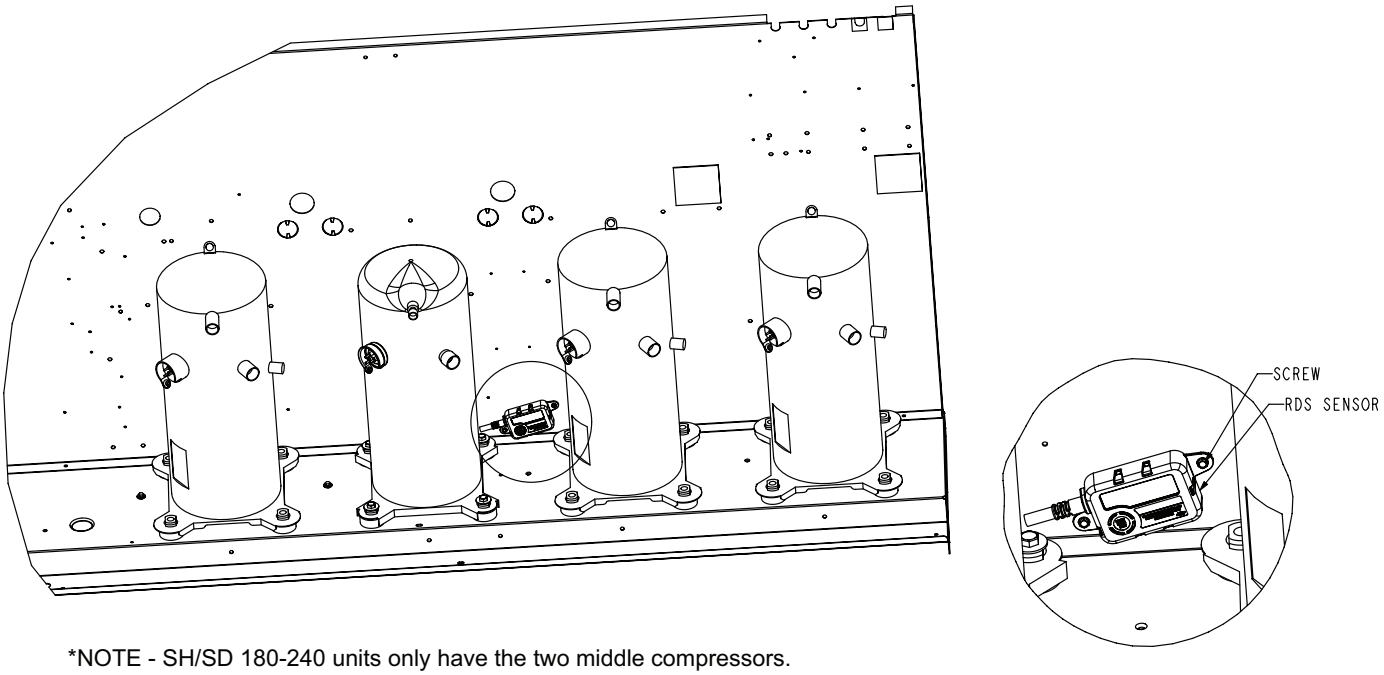


FIGURE 9

LC/LG 156-360, SG/SC/SH*/SD* 180-240
COMPRESSOR RDS SENSOR



*NOTE - SH/SD 180-240 units only have the two middle compressors.

FIGURE 10