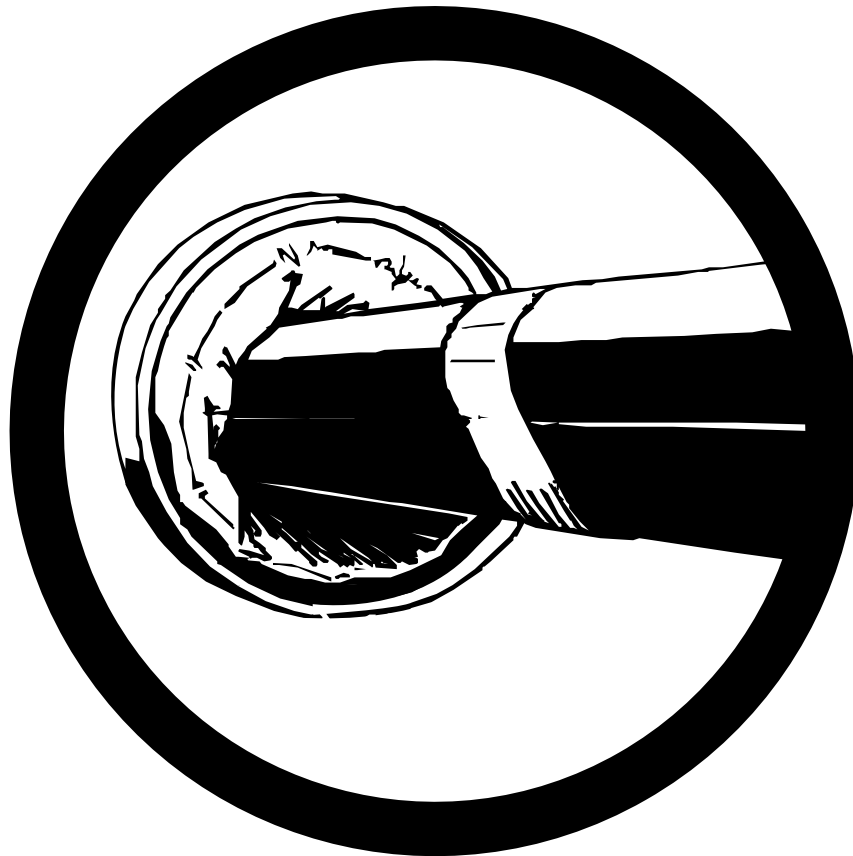


RDSS Rayflate Duct Sealing System

For Moisture Sealing on 2" to 6"
Ducts with 0, 1, or 2 Cables
For 3 or More Cables the
RDSS-Clip is also required



When using the RDSS-150, if the cable/bundle is less than 2.4" (60mm) in diameter, an RDSS-AT/AP-150 device must also be used.

Selection table

Duct Inner Diameter	Number of Cables in Duct		
	0, 1, or 2 cables	3 or 4 cables	5, 6, or 7 cables
1-1/4" (32mm)	RDSS-45 0.5" (13mm)	RDSS-45 + 1 RDSS-CLIP-45 0.30" (8mm)	RDSS-45 + 2 RDSS-CLIP-45 0.10" (3mm)
1-1/2" (38mm)	RDSS-45 1.0" (25mm)	RDSS-45 + 1 RDSS-CLIP-45 0.8" (20mm)	RDSS-45 + 2 RDSS-CLIP-45 0.6" (15mm)
1-3/4" (45mm)	RDSS-45 1.3" (32mm)	RDSS-45 + 1 RDSS-CLIP-45 1.05" (27mm)	RDSS-45 + 2 RDSS-CLIP-45 0.9" (22mm)
2" (50mm)	RDSS-60 1.2" (30mm)	RDSS-60 + 1 RDSS-CLIP-75 1.0" (25mm)	RDSS-60 + 2 RDSS-CLIP-75 0.8" (20mm)
2-1/4" (57mm)	RDSS-60 1.6" (41mm)	RDSS-60 + 1 RDSS-CLIP-75 1.4" (36mm)	RDSS-60 + 2 RDSS-CLIP-75 1.2" (31mm)
2-1/2" (64mm)	RDSS-75 1.5" (38mm)	RDSS-75 + 1 RDSS-CLIP-75 1.3" (33mm)	RDSS-75 + 2 RDSS-CLIP-75 1.1" (28mm)
2-3/4" (70mm)	RDSS-75 1.8" (46mm)	RDSS-75 + 1 RDSS-CLIP-75 1.6" (41mm)	RDSS-75 + 2 RDSS-CLIP-75 1.4" (36mm)
3" (75mm)	RDSS-75 2.2" (56mm)	RDSS-75 + 1 RDSS-CLIP-75 2.0" (51mm)	RDSS-75 + 2 RDSS-CLIP-75 1.8" (46mm)
3-1/4" (83mm)	RDSS-100 2.2" (56mm)	RDSS-100 + 1 RDSS-CLIP-100 2.0" (51mm)	RDSS-100 + 2 RDSS-CLIP-100 1.8" (46mm)
3-1/2" (89mm)	RDSS-100 2.6" (66mm)	RDSS-100 + 1 RDSS-CLIP-100 2.4" (61mm)	RDSS-100 + 2 RDSS-CLIP-100 2.2" (56mm)
3-3/4" (95mm)	RDSS-100 2.9" (74mm)	RDSS-100 + 1 RDSS-CLIP-100 2.7" (69mm)	RDSS-100 + 2 RDSS-CLIP-100 2.5" (64mm)
4" (100mm)	RDSS-100 3.2" (80mm)	RDSS-100 + 1 RDSS-CLIP-100 3.0" (75mm)	RDSS-100 + 2 RDSS-CLIP-100 2.8" (70mm)

Duct Inner Diameter	Number of Cables in Duct		
	0, 1, or 2 cables	3 or 4 cables	5, 6, or 7 cables
4-1/4" (108mm)	RDSS-100 3.5" (89mm)	RDSS-100 + 1 RDSS-CLIP-100 3.3" (85mm)	RDSS-100 + 2 RDSS-CLIP-100 3.1" (79mm)
4-1/2" (114mm)	RDSS-100 3.5" (89mm)	RDSS-100 + 1 RDSS-CLIP-100 3.3" (85mm)	RDSS-100 + 2 RDSS-CLIP-100 3.1" (79mm)
4-3/4" (121mm)	RDSS-125 3.8" (97mm)	RDSS-125 + 1 RDSS-CLIP-125 3.6" (92mm)	RDSS-125 + 2 RDSS-CLIP-125 3.4" (87mm)
5" (125mm)	RDSS-125 4.1" (103mm)	RDSS-125 + 1 RDSS-CLIP-125 3.9" (98mm)	RDSS-125 + 2 RDSS-CLIP-125 3.7" (93mm)
5-1/4" (133mm)	RDSS-150 4.3" (109mm)	RDSS-150 + 1 RDSS-CLIP-150 4.1" (104)	RDSS-150 + 2 RDSS-CLIP-150 3.9" (98mm)
5-1/2" (140mm)	**RDSS-150 4.7" (120mm)	**RDSS-150 + 1 RDSS-CLIP-150 4.5" (115mm)	**RDSS-150 + 2 RDSS-CLIP-150 4.1" (110mm)
5-3/4" (146mm)	**RDSS-150 4.9" (124mm)	**RDSS-150 + 1 RDSS-CLIP-150 4.7" (119mm)	**RDSS-150 + 2 RDSS-CLIP-150 4.5" (114)
6" (150mm)	**RDSS-150 5.1" (129mm)	**RDSS-150 + 1 RDSS-CLIP-150 4.9" (124mm)	**RDSS-150 + 2 RDSS-CLIP-150 4.7" (120mm)
6-1/4" (159mm)	**RDSS-150 5.4" (138mm)	**RDSS-150 + 1 RDSS-CLIP-150 5.2" (133mm)	**RDSS-150 + 2 RDSS-CLIP-150 5.0" (128mm)

NOTES

**In ducts where the cable/cable bundle is less than 2.4" (60mm) in diameter, an RDSS-AT/AP-150 device must be used in conjunction with the RDSS-150.

¹For duct sizes other than those shown, contact your local Raychem Representative.

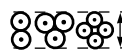
²The dimension shown in parenthesis is the maximum diameter of the cable or cable bundle for use with the specified RDSS part number. If your diameter is greater than this number, contact your local Raychem representative.

Example: Max. cable diameter



(for 1 cable installation)

Max. cable bundle diameter



(for multi-cable applications)

Safety Rules:

Lubricant:

Protect from frost. In case of eye contact, flush with clean water during 15 minutes, holding eyelids open. Seek medical attention if irritation persists. Wash with mild soap and water if skin irritation occurs.

Gas cylinders:

If the carbon dioxide gas cylinders are used to inflate RDSS, the following safety rules should be considered. The gas pressure in the cylinder is approximately 870 lb/in² at room temperature. Max. operational

temperature is 120°F (50°C). Keep cool and dry. Use only as instructed in operating manual of RDSS-IT-16 inflator. Misuse can be dangerous. Do not handle the cylinder with unprotected hands immediately after filling RDSS duct seal. Frostbite can result.

When using the RDSS-150, if the cable/bundle is less than 2.4" (60mm) in diameter, an RDSS-AT/AP-150 device must also be used.

Application:

RDSS will seal ducts with and without cable(s). In case three or more cables have to be sealed, a RDSS sealing clip is use in combination with the RDSS inflatable duct seal. The RDSS-Clip must be ordered as a separate item. Avoid exposure of the installed RDSS

duct seal to direct sunlight.

Note: For beveled ducts, the RDSS may not be installed in the beveled portion. Position the RDSS-Clip (if used) and RDSS bag in the straight portion of the duct.

Installation Instructions

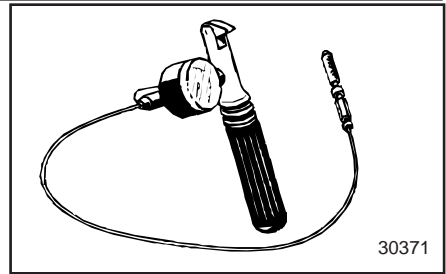
Tooling:

RDSS duct seals can be installed with a variety of inflation tools having the capability to inflate RDSS to 43.5 ± 0.6 lb/in² of pressure. The following tools are available from Raychem:

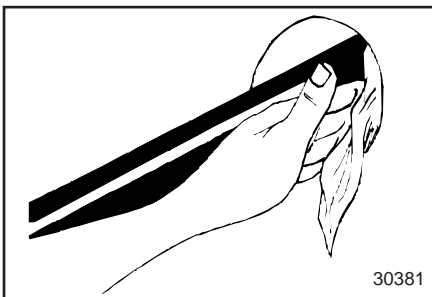
RDSS-IG-SR-AS tool for use with compressed air or nitrogen tanks

RDSS-IT-16 inflation tool equipped with a manometer and safety relieve valve using compressed CO₂ gas cylinders (to be ordered separately; part no. E7512-0160).

Refer to the operating manual of the specific tool being used.



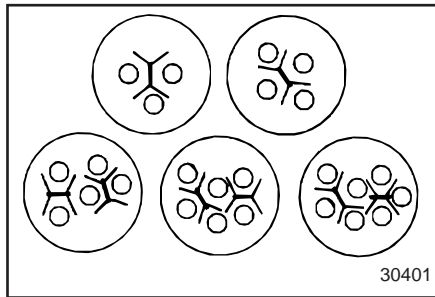
INSTALLATION



1. It is recommended to wet clean the duct and cable sheath. Remove as much dirt, crust, mud, etc. as possible.

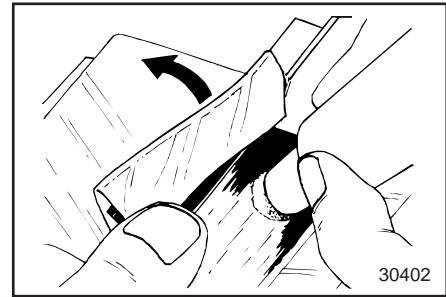
For ducts with 3 or more cables, continue with step 2.

For 0, 1, or 2 cables, skip to step 9.

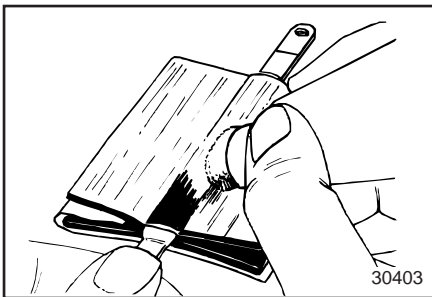


2. Examples for different multiple cable configuration.

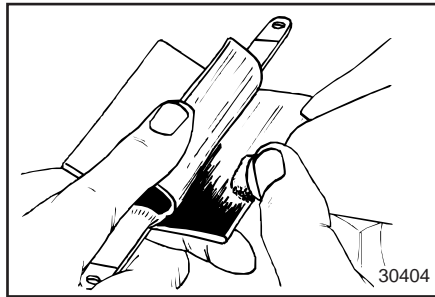
One RDSS-Clip can seal up to four cables. If more cables are to be sealed, use one extra clip per three additional cables.



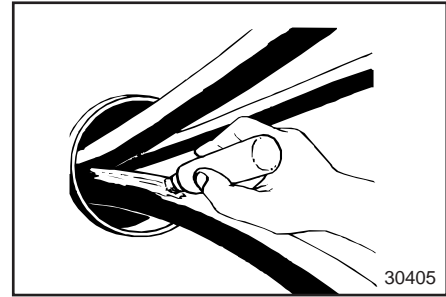
3. Open clip wings on one side. Lubricate the wings abundantly, to ensure that they don't stick together.



4. Remove one protection paper and lubricate abundantly the larger surface of the clip wing.

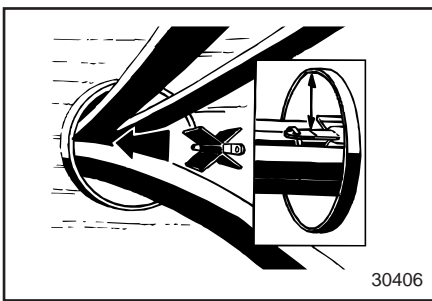


5. Repeat steps 3 & 4 for the other clip wings. Remove protection paper only after lubricating at least one wing side.



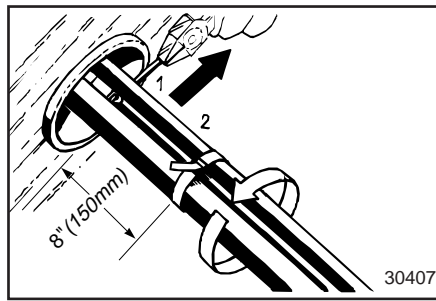
6. Abundantly lubricate the cables in the crotch area as much as possible.

Installation Instructions

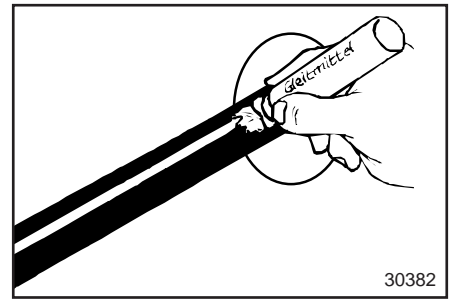


7. Insert the clip in between the cables, assuring that there is only one cable between each clip wing (see picture, step 2).

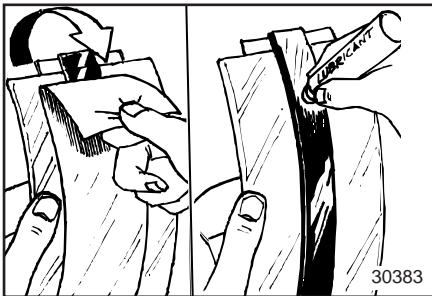
Make sure that the central part of the clip is well positioned in the crotch area. The raised line on center stick should be flush with the end of the duct. Use the short tie-wrap to hold the clip in place. Cut off the excess tie-wrap and position the locking part between the cables.



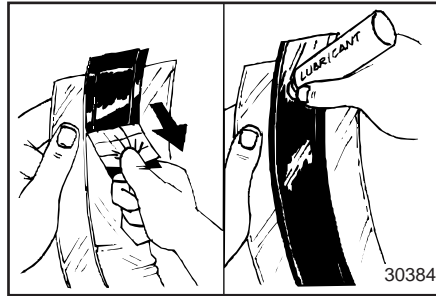
8. Install the long tie-wrap around the cable bundle at a distance of approx. 8" (150mm) from the duct entrance.



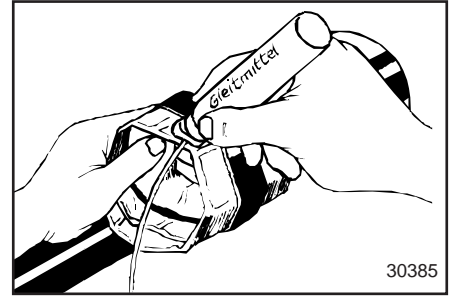
9. For ease of installation lubricate the cable sheaths.



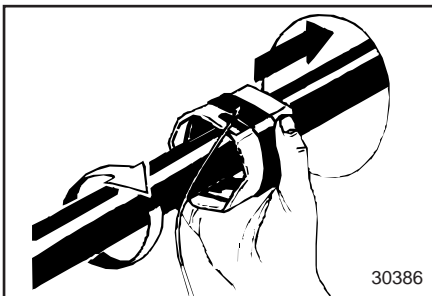
10. Remove the protective paper from the outside of the sealing strip and lubricate abundantly.



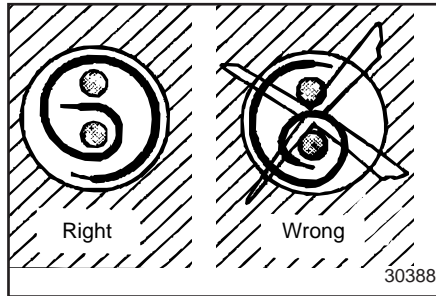
11. Continue with lubrication of the inside of the sealing strip.



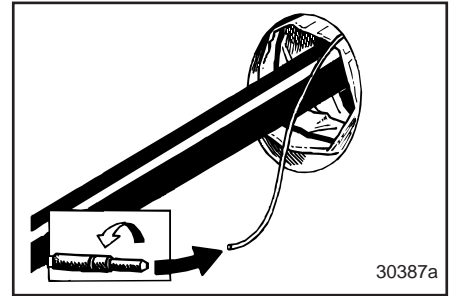
12. Lubricate the filling tube on the RDSS section.



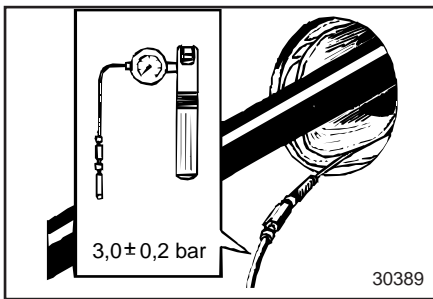
13. Wrap RDSS around the cable (or cable bundle) and slide completely into the duct.



14. In case of two cables, wrap RDSS around the cables as shown starting with the largest cable.

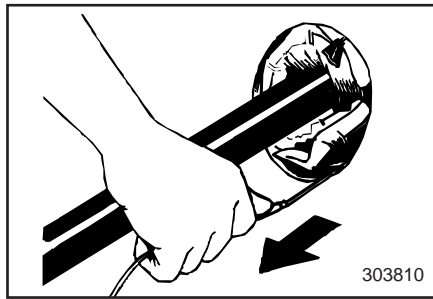


15. Connect the filling tube to the tube snap of the inflation tool. Gently insert the filling tube until it will not go any further. Tighten down the nozzle.



16. Inflate RDSS up to the pressure of 3,0 bar (43.5 psi) and keep the pressure there for 30 seconds, after which the tool must be shut off.

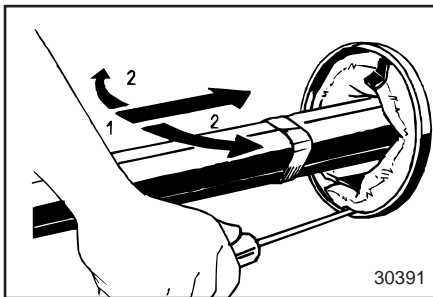
Note: Please refer to the operation manual for the specific inflation tool being used.



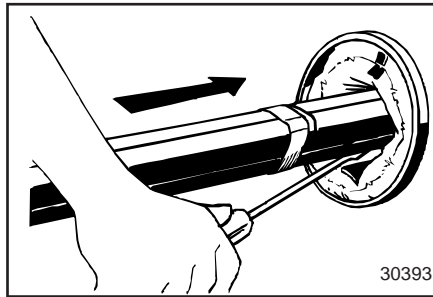
17. BEFORE removing the installation tool connection from the filling tube, pull out the filling tube in one gentle move in the direction of the cable.

Installation is complete.

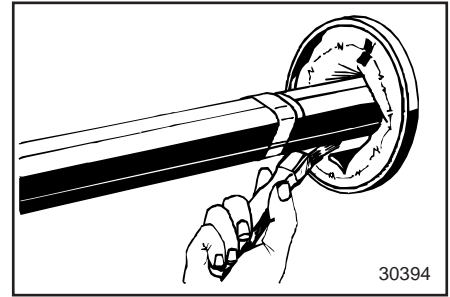
REMOVAL



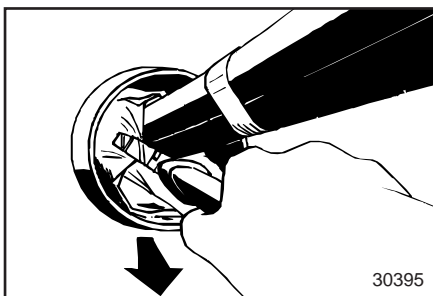
1. Deflate the RDSS duct seal by piercing with a screwdriver. Release the RDSS from the duct wall by using a blunt tool.



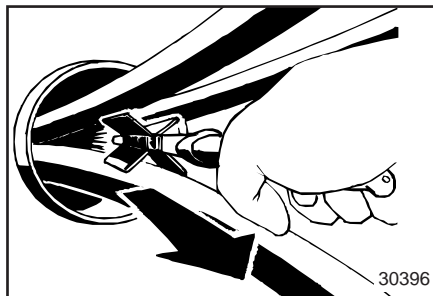
2. Release RDSS from the cable or cable bundle



3. Apply lubricant on the released areas.



4. Remove RDSS out of the duct with a pair of pliers.



5. If applicable: Remove tie wraps from the cable bundle. Spread cables. Remove clip core and sealant as much as possible with a pair of pliers.