SIEMENS

Installation Instructions
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RC 195 Receiver-Controller Restrictor and Connector Repair

Product Description

The Restrictor Kit contains three input restrictor assemblies, one supply restrictor assembly and seven gaskets.

The Connector Kit contains one supply connector assembly and one input connector assembly.

Product Numbers

Restrictor Kit	195-066
Connector Kit for Multiple Input Receiver-Controller	195-067
Connector Kit for Single Input Receiver-Controller	195-114

Required Tools

- Small, flat-blade screwdriver

NOTE: Normally, replacing restrictors or connectors will not affect calibration.

Before troubleshooting (Table 1), ensure that:

1. The supply pressure at the unit is constant (± 2 psi) 22 psi (152 kPa).
2. All transmitter inputs being used are between 3 and 15 psi (21 and 103 kPa).
3. Only one restrictor (internal or external) supplies each transmitter.
4. The transmitter calibration is correct.

Troubleshooting

Table 1. Troubleshooting Guide.

Problem	Check		Probable Cause	Corrective Action
Control pressure stays at approximately zero	Rotate setpoint adjustment screw counterclockwise	Pressure increases	Transmitter sensing medium which is above (R.A.) or below (D.A.) the proportional band	None
			RC 195 out of calibration	Recalibrate
		Pressure remains unchanged	Plugged supply restrictor	Replace supply restrictor
			Plug-in connector defective	Replace plug-in connector
			Receiver-controller is defective	Replace receiver-controller
Control pressure stays at approximately supply pressure	Rotate setpoint adjustment screw clockwise	Pressure decreases	Transmitter sensing medium which is above (D.A.) or below (R.A.) the proportional band	None
			RC 195 out of calibration	Recalibrate
		Pressure remains unchanged	Receiver-controller is defective	Replace receiver-controller
Transmitter pressure stays at approximately zero	Increase sensed medium to upper end of transmitter range	Pressure remains unchanged	Plugged input restrictor	Replace input restrictor
			No restrictor supplying transmitter	Place restrictor in the "in"' position
			Defective transmitter	Replace transmitter
Transmitter pressure will not build up to 15 psi (103 kPa)	Increase sensed medium to upper end of transmitter range	Pressure still will not build up to 15 psi (103 kPa)	Leak at or defective plug-in connector	Replace plug-in connector
			Defective transmitter	Replace transmitter
			Low supply pressure	Increase supply pressure

Installation

Transmitter (input) restrictor replacement

1. Remove the cover from the receiver-controller.
2. Using a small, flat-blade screwdriver, remove the two screws on the transmitter restrictor assembly and lift off the cover. See Figure 1.

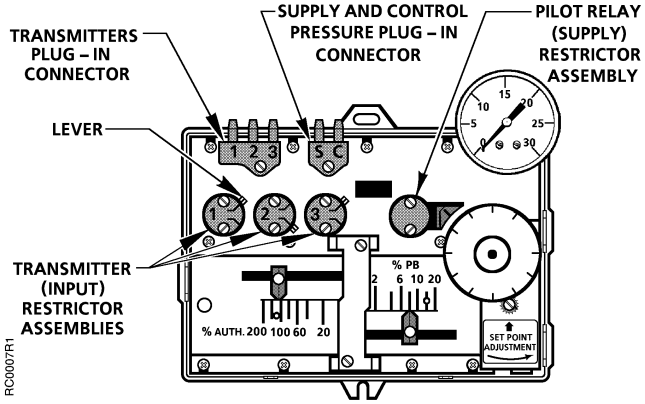

Figure 1. RC 195 Receiver-Controller.

3. Remove and replace the input restrictor (Figure 2) and two gaskets, one above and one below the restrictor.

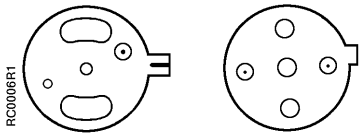

Figure 2. Restrictors.

4. After replacing the restrictor cover, tighten the screws loosely so the restrictor can move.
5. With the lever, move the restrictor several times to align the gaskets.
6. Move the lever into the correct "In" or "Out" position.
7. Alternately tighten the two screws. Draw assembly up snugly but do not overtighten. Over tightening can squeeze the gasket material into the restrictor air passage and prevent air from passing through it.

Pilot relay (supply) restrictor replacement

1. Using a small, flat-blade screwdriver, remove the two screws on the pilot relay restrictor assembly and lift off the cover. See Figure 1.
2. Remove and replace the supply restrictor (Figure 2) and gasket. Gasket is between the restrictor and the cover.
3. Alternately tighten the two screws. Draw assembly up snugly but do not overtighten. Overtightening will squeeze the gasket material into the restrictor air passage and prevent air from passing through it.

Plug-in connector replacement

The transmitter plug-in connector has numbered ports molded on it.

The supply and control pressure plug-in connector has the letters "S" and "C" molded on it.

1. Remove the screw from the connector to be replaced.
2. Remove the connector. Ensure that the O-rings remain in their position behind the steel plate.
3. Ensure the diaphragm does not extend into the hole. If the diaphragm gets caught between the connector post and the O-ring, the port will leak.
4. Moisten the connector barbs to help them slip through the O-rings. Carefully press the new connector into the plug-in opening.
5. Place the screw in the connector and tighten it securely.

The installation is now complete.

Service

The RC 195 Receiver-Controller requires a clean, oil-free, dry source of air. In-line filters are recommended if there is any doubt about the quality of the air supply, or if you are replacing restrictors frequently.

References

Operation and adjustment information

RC 195-1	*155-036P25*
RC 195-4	*155-119P25*

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