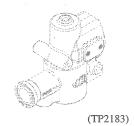
Form P7648 Edition 1 June, 2003

INSTALLATION AND MAINTENANCE MANUAL for SRV125F STARTER RELAY VALVE





! WARNING

IMPORTANT SAFETY INFORMATION ENCLOSED. READ THIS MANUAL BEFORE OPERATING TOOL. FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

- Always bleed off the air pressure before attempting to unscrew the Starter Relay Valve from the Receiver or before attempting to perform any maintenance on the Starter Relay Valve.
- Never attempt to remove the Retaining Ring (12) from the bottom side of the Starter Relay Valve until the air pressure has bled off. If the Retaining

- Ring is removed while there is pressure in the Receiver, internal parts of the Starter Relay Valve will be blown out with considerable force.
- Use only recommended Ingersoll-Rand accessories.

NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased starter relay valve performance and increased maintenance, and may invalidate all warranties.

Ingersoll-Rand is not responsible for customer modification of valve for applications on which Ingersoll-Rand was not consulted.

Repairs should be made only by authorized, trained personnel. Consult your nearest Ingersoll-Rand Authorized Service Center.

It is the responsibility of the employer to place the information in this manual into the hands of the operator.

Refer All Communications to the Nearest Ingersoll-Rand Office or Distributor.

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WARNING LABEL IDENTIFICATION





PLACING THE STARTER RELAY VALVE IN SERVICE

! WARNING

Always wear eye protection when performing any maintenance on this valve.

---- PRE-INSTALLATION ----

- 1. Clean the air line, o-ring groove and sealing surfaces to be sure they are free of foreign material.
- 2. Ensure that enough space is left for removal and service of this valve.
- 3. Ensure that the air line is suitably aligned and supported to avoid strained joints.
- 4. Do not over tighten the air line connections.
- 5. All Starter Relay Valves are to be installed with the Valve in the vertical position.

NOTICE

This Starter Relay Valve is specially designed and manufactured by Ingersoll-Rand for use on Starter

Installations. Install it in accordance with the following instructions.

---- INSTALLATION ----

- 1. Place the O-Ring supplied with the flange fitting into the groove on the Starter Relay Valve.
- 2. Mount the Starter Relay Valve to the tank using ST500-K166 Flange Assembly. The air flow arrow must point toward the starter.
- 3. Check the O-Ring to see that it properly seated in the groove to prevent cutting.
- 4. Push the two clamp halves inward as far as they will go.
- 3. Tighten the four flange bolts in an alternating pattern to 35-45 ft-lbs (47-61Nm) torque.
- 4. Attach the air hose from the outlet side of a 3-way normally vented Control Valve to the small tapped hole in the top of the Starter Relay Valve. Use SMB-441 Ingersoll-Rand Sealant on the male thread.

MAINTENANCE SECTION

! WARNING

Always wear eye protection when lubricating or performing maintenance on the Starter Relay Valve. Always bleed off the air pressure before lubricating or performing any maintenance on the Starter Relay Valve.

---- LUBRICATION ----

Periodically lubricate the Starter Relay Valve as follows:

- 1. Bleed off the air pressure.
- 2. Disconnect the No. 4 Hose from the tank at the control air supply port near the bottom of the Starter Relay Valve opposite the air inlet. In some installations, this ¼" N.P.T. will be plugged.
- 3. Remove the plug. Squirt approximately 1 ounce (30 cc) of 10W oil into the Starter Relay Valve through the hose plug opening.
- 4. Reconnect the hose or reinstall the plug.

NOTICE

No. SRV150-TK3 Tune Up Kit is available for maintaining the Starter Relay Valve. This Tune Up Kit includes all O-Rings (3,6,9,11), Bumper (5), O-Ring Retainer (7), End Plug Retaining Ring (12) and Grease.

---- INSTALLATION ---OF THE TUNE UP KIT

Disassembly of the Starter Relay Valve

- 1. Bleed off the air pressure.
- 2. Clamp the Starter Relay Valve in a vise with the Retaining Ring (12) facing up.

- 3. Carefully remove the Retaining Ring. The End Plug (10) should spring out. If it does not, tap the Valve Housing (1) lightly with a soft hammer until the End Plug springs out.
- 4. Remove the End Plug, Spring (8), and Piston Assembly (4).
- 5. Remove and discard all of the used O-Rings and the Bumper (5).
- 6. Clean all other parts in a clean, suitable cleaning solution in a well ventilated area.

Assembly of the Starter Relay Valve

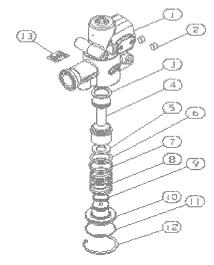
1. Using O-Ring lubricant, lubricate and install the new Piston O-Ring (6) and the new Upper Piston O-Ring (3) on the Piston (4).

NOTICE

The Upper Piston O-Ring (3) is slightly larger in diameter than the End Plug O-Ring (9).

- 2. Turn the Piston over and install the new Bumper (5).
- 3. Using O-Ring lubricant, lubricate and install the new End Plug Seal O-Ring (11) and the new End Plug O-Ring (9) on the End Plug (10).
- 4. Lubricate the lower small bore of the Valve Housing (1) with o-ring lubricant.
- 5. Insert the Piston Assembly into the Valve Housing until the Piston O-Ring (6) seats against the beveled face.
- 6. Install the O-Ring Retainer (7) with the large opening over the Piston O-Ring.
- 7. Place the Piston Spring (8) on the Piston.
- 8. Place the End Plug Assembly on the Piston Spring.
- 9. Using a press to hold down the End Plug Assembly, install the End Plug Retaining Ring (12).

MAINTENANCE SECTION



(TP2184)

PART NUMBER FOR ORDERING

1	Valve Housing	SRV125F
2	Pipe Plug (2 Required)	HSPPS-2
3	Upper Piston O-Ring	* SRV150
4	Piston	SRV150-
5	Bumper	* SRV150
6	Piston O-Ring	* SRV150
7	O-Ring Retainer	* SRV150
8	Spring	SRV150-2
9	End Plug O-Ring	* SRV150
10	End Plug	SRV150-2
11	End Plug Seal O-Ring	* Y327-14
12	Retaining Ring	* SRV150
13	Warning Label	04333274
+	Tune Up Kit	SRV150-7
	=	

↓ F-40 50-210 -246 50-339 50-211 50-33 -250 50-67 -338 143 50-340

> SRV150-TK3 SMB-441 * SRV-GR55

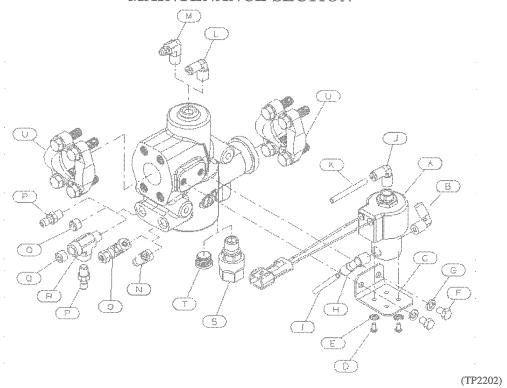
- Indicates parts available in Tune Up Kit Item Not Shown
- (+)

Grease

+

Pipe Sealant

MAINTENANCE SECTION



Optional Equipment
Solenoid and Mounting Hardware – Position 1

2016	mora ana i	Mounting Hardware – Position 1	
	A	Solenoid	
		12 Volt, Pioneer Connectors	150BMP-A1051C
		12 Volt, Wire Leads	150BMP-1051B
		24 Volt, Wire Leads	150BMP-2451B
	В	90' Elbow with Push to Lock	EL90-4M4DOT
	C	Solenoid Mounting Bracket	150TMP-2451
	D	Solenoid Mounting Screw (2 Required)	Y133-105C
	E	Solenoid Mounting Screw Washer (2 Required)	Y117-110
	F	Solenoid Mounting Bracket Screw (2 Required)	150TMP-128
	G	Solenoid Mounting Bracket Washer (2 Required)	Y14-516C
	H	90' Elbow with Push to Lock	EL90-4M4DOT
	I	Connection Hose	150TMP-125
	J	90' Elbow with Push to Lock	EL90-4M4DOT
	K	Connection Hose	150TMP-125
Pilo	t Port Hard	dware – Position 2	
	L	90' Elbow with Push to Lock	EL90-4M4DOT
	M	90' Elbow with JIC 37'	EL90-4M437M
Left	and Right	Live Air Port Hardware – Position 3 and 4	
	N	90' Elbow with Push to Lock	EL90-4M4DOT
	O	T Connection with Push to Lock	150TMP-MRT4M4
	P	Schrader Valve	04333654
	Q	¼" Pipe Plug	HSPPS-2
	R	T Fitting with ¼" NPT	SRV125F-188
	+	Pressure Gauge	100083
Seco	ondary Inle	et Port Hardware – Position 5	
	S	Check Valve	ST400-1056
	T	Plug	SRV125F-34
	U	1 1/4" Flange Kit	ST500-K166

(+) Item Not Shown

For Position Coding information refer to Drawing 10554749