

Roping Chute

Troubleshooting Guide

RC98A - RC98AI - RC98SCORE - RC98Q36

INCLUDES: RC98ASRAI, RC98ASRD, RC98ASR2PD, RC98A



Priefert®
Rodeo & **Ranch Equipment**

www.priefert.com 800-527-8616

Using this Troubleshooting Guide:

This Troubleshooting Guide is designed to assist you with general problem solving, operation and adjustments of the RC98 Roping Chute. Read this Guide and follow the recommendations to help resolve some of the basic corrections to possible problems you may be having and efficient operation of the RC98 Roping Chute.

Remember, this is only a guide of more frequent issues encountered during the general operation of the Roping Chute. Your issues may, or may not be covered, but your Priefert Representative should be able to assist you with other concerns you have or issues not addressed here.

The information contained within this guide was current at the time of printing. Your model may vary in design and configuration from those shown in this guide. Be sure you are reviewing the information for your specific model since revisions and improvements have been made with newer versions, and, some parts may change slightly to assure you of the best performance.

The Troubleshooting Guide is a compilation of engineering data and field experience, and contains general information for adjustments, repair and operation for general usage, you should be able to find the right procedures that are perfectly suitable to your arena(s) needs.

Terminology

“Right” or *“Left”* as used in this guide is determined by facing forward in the direction the chute will operate while in use unless otherwise stated.



Notations

Throughout this guide, many part numbers for the item referred to will be noted in parentheses and italicized, i.e. (*ABCD1234*). This number can be cross-referenced in the Parts Lists for a visual reference of the item.

Due to revisions and modifications made during production, your chute model may vary slightly from the pictures or illustrations in this guide. However, the information provided will assist you in resolving most issues related to the model indicated.

Owner Assistance

If customer service or repair parts are required contact Priefert Manufacturing to reach our trained personnel who will assist you with repair parts and equipment needed to service or repair your Roping Chute. The parts on your Roping Chute have been specifically designed and should only be replaced with authorized Priefert replacement parts. Therefore, should your Roping Chute require replacement parts contact our Support Center.

Contact your Priefert Ranch Equipment dealer to discuss any problems that you may be experiencing. Allow them the opportunity to assist in correcting any problems, or answer questions that you may have.

For further assistance, contact:

Priefert Manufacturing
Attention: Customer Service

2630 South Jefferson

P.O. Box 1540

Mount Pleasant, Texas 75456-1540

1-800-527-8616

www.priefert.com

sales.priefert.com

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Priefert Roping Chutes

All Priefert automatic roping chutes utilize the same basic requirements of electricity and compressed air. Before attempting to resolve a problem in the operation of your chute, review these Basic Troubleshooting steps. Sometimes the basic requirements can be overlooked. *Only the RC98Q36 requires no electrical connection or compressed air.*

Problem: *Chute will not work at all.*

Two basic requirements for Roping Chutes* are:

1. 110VAC Electrical Connection
2. 90psi Compressed Air

Step 1 – 110VAC Electrical Connection:

Check Power source. Be sure that sufficient current is available and that the breaker/fuse is good. Check outlets and any extension cords used in the connection. If there is power to the Control Box, the GREEN indicator light will be illuminated.



Step 2 – 90psi Compressed Air Supply:

Check to be sure that the compressed air line is connected properly to the back of the control box. Proper performance requires a minimum of 2hp air compressor that will produce 3.1 cfm at 90 psi, with a 4 gallon tank.



NOTICE: *Priefert Manufacturing Recommends using a dedicated Air Compressor to prevent damage from contamination to the Compressed Air System. Use Clean & Dry Compressed Air Supply. Drain Compressor & Air Tanks Daily.*

- ***If neither of these issues resolves the problem, locate your model of Roping Chute on the next page to find more detailed Troubleshooting procedures.***

* Q36 requires neither electrical connection or compressed air



HOW TO DETERMINE THE ROPING CHUTE MODEL

This table will help you determine the specific model of roping chute you need to reference. Revisions and changes in design require different steps to troubleshoot problems. Locate the remote which you have and this will determine which model of roping chute to reference: The right-hand side of each blue topic bar will have the picture of which remote that topic references. This will assist in determining the specific topic refers to the proper chute.

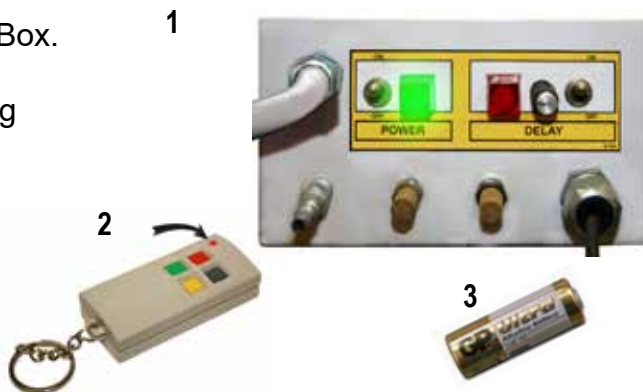
<i>Model</i>	<i>Manufacture Date</i>	<i>Remote Style</i>	<i>Page #</i>
RC98A RC98AI (Early Model)	Month 1998 to Month 2011 January 2008 to January 2010	 Trans2001	4
RC98AI (Early Model)	January 2010 to November 2010	 Trans2010-RC-Y	9
RC98AI	November 2010 to June 2011	 Trans2010-RC-B	9
RC98AI Current RC98SCOREAI	June 2011 to Present	 Trans2010-RC-R	14
RC98Q36	January 2013 to Present	 TransQ36	16



RC98A - Basic Troubleshooting Procedures

1. Check to be sure GREEN Power light is on Control Box.
2. Make sure indicator light is coming on when pressing the buttons on the remote control.
3. If not, change the battery and try again.

► If there is still **NO** activity from the chute:
GO TO PAGE 5



RC98AI / RC98SCOREAI - Basic Troubleshooting Procedures



1. Check to be sure GREEN Power light is on Control Box.
2. Make sure indicator light is coming on when pressing the buttons on the remote control.
3. If not, change the battery and try again.

RC98AI

► If there is still **NO** activity from the chute:
GO TO PAGE 9

RC98SCOREAI

► If there is still **NO** activity from the chute:
GO TO PAGE 14



RC98Q36 - Basic Troubleshooting Procedures



1. Check to be sure Power is on.
2. Make sure indicator light is coming on when pressing the buttons on the remote control.
3. If not, change the battery and try again.

► If there is still **NO** activity from the chute:
GO TO PAGE 16





(RC98A) (RC98ASR2PD)

1. Remove control box cover. Make sure the receiver light inside the control box is coming on when pressing the remote control buttons.

► **If there is NO light on the Receiver:**
GO TO PAGE 6

2. Remove the back of the remote control and flip the dip switches back and forth in an effort to reset the dip switches.

If you have a second remote control (*TRANS2001*) give it a try.

If you only have a single remote remove the back as if you were going to change the battery. You will see 8 small dip switches. Start with number 1 and flip it like you are turning a light switch off and right back on. Do this with all eight dip switches. In other words, each switch will need to be reset. Occasionally, one of the switches will toggle loose and need to be reset when in fact it looks perfectly normal.

See picture at right for details

Note: The factory code is set to 1,3,8 off (away from the numbers) 2,4,5,7,8 on (toward the numbers)

Be sure to return them to their factory setting.

3. The receiver (*REC2001*) located on the heeler side of the control box may need to have the dip switches reset as well. As in the transmitter, the receiver codes will need to be reset in the same manner. Start with number 1 and work your way to number 8 by flipping to dip switch in the opposite direction and right back to its original position.

See picture at right for details

Note: The factory code is set to 1,3,8 off (toward the numbers) 2,4,5,7,8 on (away from the numbers)

Be sure to return them to their factory setting.

Attempt chute operation again.

► **If there is still NO activity from the chute:**
GO TO PAGE 7



TRANS2001 Dip Switches



REC2001 Dip Switches

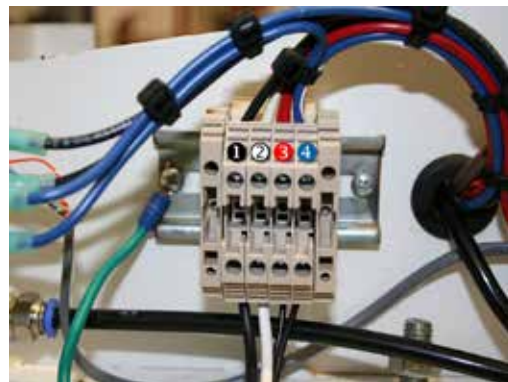


RC98A - Electrical Troubleshooting

(RC98A) (RC98ASR2PD)

The control box will not respond to anything and the lights are not on the back of the control box.

1. Make sure the power to the control box is good (120VAC). If the power source shows 120VAC, then remove the lid to the control box. Go to the heater side of the control box. You will see a set of terminal blocks. The top side of the terminal blocks from left to right has ❶ black wire ❷ white wire ❸ red wire ❹ blue wire. Check the 120VAC by placing your volt meter leads to the screws of the terminals with the ❶ black and ❷ white wires. If the power is good you should get a reading of around 120VAC.



Terminal Blocks

Next check the 12VDC by placing your volt meter leads to the screws of the ❸ red and ❹ blue wires. Your volt meter should read around 12VDC. If you do not get a reading around 12VDC you should replace the Power Supply (PS12VR).

Note: When replacing the Power Supply (PS12VR) the wire with the white stripe is the negative 12VDC and should be matched with the blue wire of terminal ❹.

Attempt chute operation again.

- If there are still ***NO Lights*** on the back of the Control Box and no activity from the chute: Call a Priefert Sales Representative for Assistance at 1-800-527-8616
- If there ***ARE Lights*** on the back of the Control Box, ***BUT NO*** activity from the chute:
GO TO PAGE 7



(RC98A) (RC98ASR2PD)

If there is NO activity or the head gate will open, but nothing else works.

1. Make sure the compressor is connected and working properly.
2. We can eliminate this being an air issue by pressing the manual buttons located on the top of each air valve as shown in the pictures on the right.

Header side air muffler leak - (SY5420-6D-N7T)

Heeler side air muffler leak - (SY5120-6DZ-N7T)



Manual Buttons SY5420-6D-N7T

By pressing these buttons it forces the air valve to function. If the valve will not operate by pressing the button, simply back track your way from the valve to the compressor checking for restricted airlines or lack of airflow from the compressor.



Manual Button SY5420-6DZ-N7T

3. The control valves may need to be removed and cleaned of debris. The small holes in the control valves may become clogged.



Control Valve

4. Remove the airline mufflers (MF04) from the back of the control box. Check to make sure these are not plugged or restricting the air flow. While these are removed, operate the chute several times. This will allow full air flow to pass through the valves and clear any debris that may be caught inside the valves themselves.



Airline Mufflers MF04

► **If there is still NO activity from the chute:**
Call a Priefert Sales Representative for Assistance at 1-800-527-8616



RC98A - Miscellaneous Q & A

(RC98A) (RC98ASR2PD)

Problem: My remote control doesn't have the range that it once did.

Solution: *Make sure the battery is good. When replacing the battery use a 12VDC replacement battery.*



23AE-12V_Battery

Also, make sure that the antenna is properly installed and not broken. If the problem still exists the receiver (REC2001) may need replacing.

Problem: Everything works except for a particular channel.

Solution: *This is most likely a receiver (REC2001) channel that has stopped working. In most cases this will be a problem that begins intermittently. **Example:** The head gate close works 5 times in a row then will not work for several times.*

This could however be an air related issue as well. Refer to the Pneumatic (Air) Troubleshooting section for air related issues.

*RC98A - Pneumatic Troubleshooting **GO TO Page 7***

RCBOARDDC (RC98ASRD, RC98ASR2PD)

Problem: When the control box is in delay mode the laundry solenoid (SOLENOIDL-P) stays activated.

Solution: *The delay board (RCBOARDDC) needs to be replaced.*

Note: When replacing the delay board, change wire for wire one at a time.



RCBOARDDC

(RC98A)

Problem: The lamps on the back of my control box are not on, but everything works like normal.

Solution: *The lamps should be replaced. The green lamp (LAMP12VG) is a power indicator simply showing that the roping chute is on and ready for use. The red lamp (LAMP12VR) shows the delay has been activated and head gate is about to open.*



LAMP12VR

LAMP12VG

Problem: My remote control doesn't have the range that it once did.

Solution: *Make sure the battery is good. When replacing the battery use a 12VDC replacement battery.*

Also, make sure that the antenna is properly installed and not broken. If the problem still exists the receiver (REC2001) may need replacing.



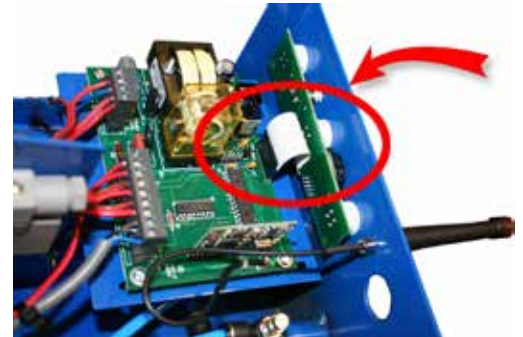
REC2001



(RC98AI) (RC98ASRAI)

No Lights, No Activity from the chute.

1. Make sure the power to the control box is good (120VAC).
2. Make sure the terminal strips are seated properly. These connections are a snap fit and sometimes will come loose during the shipping process.
3. If the LED light on the back does not indicate power, make sure the ribbon cables connecting the two circuit boards are seated properly. This cable provides the power for the LED of the power indicator light as well as the delay and Photo-Eye indicators.



Ribbon Cables

Panel Lights are ON, Remote Light is ON, but chute will not work.

Make sure the battery is good by pressing any button on the remote. The led should be bright and crisp. Next, check to make sure the antenna is installed properly on the back of the control box. The remote (TRANS2010-RC-Y, TRANS2010-RC-2, or TRANS2010-RC-SCORE) may need replacing.

1. Yellow button remote control (TRANS2010-RC-Y) are not fixed code remote controls and need to be programmed to match your chute. To do this, follow these steps:



Programming the Roping Chute Remote

- a. Turn off the power to the control box. The "On/Off" toggle switch is located on the front of the control box.
- b. Push and hold the red button on the back of the control box while turning the "On/Off" toggle switch ON
- c. The two red lights on the back of the control box will start to alternate. Now release the red button.
- d. Press and hold any button on the remote control until the lights stop alternating.
- e. Once the lights stop alternation simply turn the "On/Off" toggle switch OFF and then back on again.



On/Off toggle switch



"Red Button"
(Automatic Mode)

2. The remote control should now be programmed to the chute.

► If there is still **NO** activity from the chute:
Call a Priefert Sales Representative for Assistance at 1-800-527-8616

► Chute doesn't work in Automatic Mode:
GO TO PAGE 10



RC98AI - Photo-Eye Troubleshooting

(RC98AI) (RC98ASRAI)

Chute does not respond when Control Box is in Automatic Mode.

1. Make sure the Photo-Eye (RCSEN) located on the bottom of the control box on the header side is free of debris.
2. Next make sure the red button on the back of the control box is pressed and the led to the far right of the control box marked "Robotic Mode" or "Automatic Mode" is on.
3. Now attempt to work the chute. If this still doesn't work, turn the power to the roping chute control box off and back on the reset the unit. If there is still no response, the Photo-Eye may need to be reprogrammed.
4. Remove the lid from the control box and go to the header side of the chute. Locate the controls on the end of the Photo-Eye.
5. When in Automatic Mode, the Photo-Eye should have the light "DO" illuminated, and the "SIG" LED should come on when waving your hand through the beam underneath the Photo-Eye.

NOTE: You will not be able to see the beam of the Photo-Eye.

If the "LO" light is illuminated, the Photo-Eye needs to be reprogrammed.

- To reprogram the Photo-Eye:
GO TO PAGE 11



**ONLY USE
SOFT CLOTH TO
CLEAN UNDERSIDE**

Remove Debris from Photo-Eye



"Robotic" or "Automatic" ON



Step #	Delay Time	LED Status
0	No Delay	
8	0.062 second	
24	0.250 second	
40	1.00 second	
56	4.0 seconds	
72	16 seconds	

Photo-Eye Adjustments and Settings



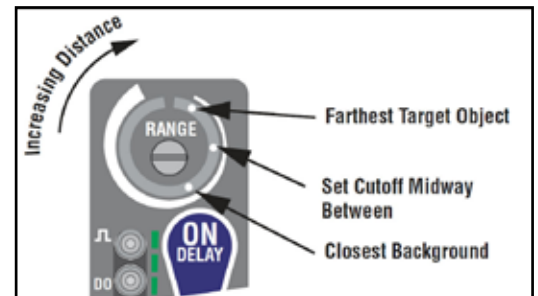
(RC98AI) (RC98ASRAI)

Programming The Photo-Eye: The “LO” light is on now.

1. Press and hold both the “ON Delay +” and the “OFF Delay –” buttons until the “DO” light is illuminated, then you may release the buttons.
2. Press the On Delay + button. The led between the “ON Delay +” and the “OFF Delay –” should start to flash.
3. Hold down the “ON Delay +” button and the lights to right will start to toggle down from “SIG” down to “DO”. When the “DO” is fully illuminated the head gate should have a 4-5 second delay when closing once the steer has left the chute.

4. Next the “Range” should be adjusted. Wave your hand back and forth underneath the Photo-Eye and you will see the “SIG” light come on. This should be adjusted to about 3 feet.

To adjust the “Range” use a small slot head screw driver turning the dial at the bottom of the Photo-Eye marked “Range” clockwise until you are able to wave your hand about three feet below the Photo-Eye of the control box and see the “SIG” light flash.



Adjusting Range of Photo-Eye

5. Turn the power to the Control Box off and back on. Attempt to work the chute.

► If there is still **NO** activity from the chute:

Call a Priefert Sales Representative for Assistance at 1-800-527-8616

Adjust the Delay Function.

NOTE: Before adjusting the “DELAY” function, make sure all gates are closed and the chute has fully cycled through.

6. Press the “On Delay +” button. The led between the “ON Delay +” and the “OFF Delay –” should start to flash.
7. Hold down the “ON Delay +” button and the lights to right will start to toggle from “SIG” up to “DO”. When the “DO” is illuminated, the head gate should have a 4-5 second delay when closing once the steer has left the chute.



RC98AI - Pneumatic (Air) Troubleshooting

(RC98AI) (RC98ASRAI)

The head gate will open, but nothing else works.

For Valves (SY5120-5D-N7T, SY5420-5D-N7T)

1. Make sure the compressor is connected and working properly. We can eliminate this being an air issue by pressing the manual buttons located on the top of each air valve as shown. By pressing these buttons it forces the air valve to function.
2. If the valve will not operate by pressing the button, simply back track your way from the valve to the compressor checking for restricted airlines or lack of airflow from the compressor.



Manual Buttons

Head gate close and/or tail gate open or close is sluggish

1. Adjust air pressure from the compressor.
2. Adjust control valves to allow more air pressure. These are located just inside the back corner on the control box on the header side.

NOTE: The control valves may need to be removed and cleaned of debris.



Control Valves

**The CONTROL VALVE pointing toward the front of the chute is for the head gate cylinder.
The CONTROL VALVE pointing straight up is for the tail gate cylinder.**

3. Remove the airline mufflers (MF04) from the back of the control box. Check to make sure these are not plugged or restricting the air flow. While these are removed, operate the chute several times. This will allow full air flow to pass through the valves and clear any debris that may be caught inside the valves themselves.



Header side air muffler - (SY5420-5D-N7T) - RC98AI; RC98ASRAI; RC98ASRAI; RC98ASRAI-CALF
Heeler side air muffler - (SY5120-5D-N7T) - RC98AI; RC98ASRAI; RC98ASRAI; RC98ASRAI-CALF

► **If there is still NO activity from the chute:
Call a Priefert Sales Representative for Assistance at 1-800-527-8616**



(RC98AI) (RC98ASRAI)

Problem: My remote control doesn't seem to work properly

Solution: *Make sure the battery is good by pressing any button on the remote. The led should be bright and crisp. Next, check to make sure the antenna is installed properly on the back of the control box. If these do not work, the receiver on the circuit board (RCGR) may be faulty.*



RCGR

Problem: The trip lever remains in the up position and causes the head gate to bounce back open when the chute is in Photo-Eye mode.

Solution: *The laundry solenoid (SOLENOIDL-P) needs to be replaced. A small modification is made to allow the solenoid to drop before the head gate cycle activates.*

Note: Make sure the solenoid is not in a mechanical bind and works free by lifting the trip lever up and down easily with your fingers. If the solenoid doesn't operate freely the control box may need some adjustment. To adjust the control box simply loosen the bolts that hold the control box to the center rail of the roping chute. Move the control box to allow the trip lever to work with ease, then tighten the bolts back.



Laundry Solenoid

- If there is still no activity from the chute:
Call a Priefert Sales Representative for Assistance at 1-800-527-8616

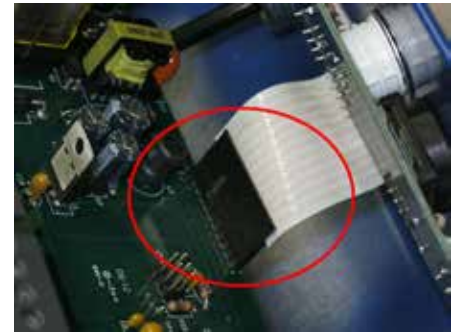


RC98SCOREAI - Electrical Troubleshooting

(RC98SCOREAI)

No Lights, No Activity from the chute.

1. Make sure the power to the control box is good (120VAC).
2. Make sure the terminal strips are seated properly. These connections are a snap fit and sometimes will come loose during the shipping process.
3. If the LED light on the back does not indicate power, make sure the ribbon cables connecting the two circuit boards are seated properly. This cable provides the power for the LED of the power indicator light as well as the delay and Photo-Eye indicators.



Ribbon Cable

Panel Lights are ON, Remote Light is ON, but chute will not work.

1. Make sure the battery is good by pressing any button on the remote. The led should be bright and crisp.
2. Check to make sure the antenna is installed properly on the back of the control box. If these do not work, the receiver on the circuit board (RCGR-SCORE) may be faulty.
3. The remote (TRANS2010-RC-SCORE) may need replacing.



RCGR-SCORE

► **If there is still *NO* activity from the chute:**
GO TO PAGE 15



(RC98SCOREAI)

The head gate will open, but nothing else works.

For Valves (SY5120-6D-N7T, SY5420-3D-N7T)

1. Make sure the compressor is connected and working properly. We can eliminate this being an air issue by pressing the manual buttons located on the top of each air valve as shown. By pressing these buttons it forces the air valve to function.
2. If the valve will not operate by pressing the button, simply back track your way from the valve to the compressor checking for restricted airlines or lack of airflow from the compressor.



Manual Buttons

Head gate close, and/or tail gate open or close is sluggish

1. Adjust air pressure from the compressor.
2. Adjust control valves to allow more air pressure. These are located just inside the back corner on the control box on the header side.



Control Valves

NOTE: The control valves may need to be removed and cleaned of debris.

The CONTROL VALVE pointing toward the front of the chute is for the head gate cylinder. The CONTROL VALVE pointing straight up is for the tail gate cylinder.

3. Remove the airline mufflers (MF04) from the back of the control box. Check to make sure these are not plugged or restricting the air flow. While these are removed, operate the chute several times. This will allow full air flow to pass through the valves and clear any debris that may be caught inside the valves themselves.



Header side air muffler - (SY5420-3D-N7T) - RC98SCOREAI

Heeler side air muffler - (SY5120-6D-N7T) - RC98SCOREAI

► **If there is still NO activity from the chute:
Call a Priefert Sales Representative for Assistance at 1-800-527-8616**



RC98Q36 - Electrical Troubleshooting

(RC98Q36)

No Activity from the chute.

1. Make sure the battery is good by pressing the button on the remote. The led should be bright and crisp.
2. Turn the power switch off and back on to clear the system.
3. Make sure the Solar Panel is clean and dirt-free. The panel must be able to get full sunlight to charge the internal battery. If necessary, clean the solar panel with a damp cloth and allow the sun to charge the internal battery for 8-10 hours, then try again.
4. Remove the cover and check to see that the battery is connected. It is sometimes necessary to disconnect and reattach the spade connectors to insure a good electrical connection.
5. The remote (*TRANSQ36*) may need replacing. When replacing the Q36 remote, follow the programming instructions included with the remote.



Q36 Solar Panel



Power Switch



Battery Connections

- If there is still **NO** activity from the chute:
Call a Priefert Sales Representative for Assistance at 1-800-527-8616

PARTS LIST

COVERS:

RC98A

RC98AI

(Early Models thru Current)

RC98SCOREAI

RC98Q36



Trans2001



Trans2010-RC-Y



TRANS2010-RC-2



Trans2010-RC-SCORE



TransQ36



RCF040.7503.25

RCF040.7505.19-P
RCF040.75003-P

FB061.25ZPG5AT
FN06ASLN

FB10-32X1.5SHCS
FN10-32



Pieced Assembly

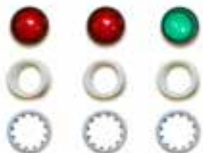


KNOBPOT-AI



23AE-12V

Kitted with RCGR & RCGR2



ANTKIT-AI



SPSTSWITCH



DPDTSWITCH



RH2BUDC12V



SOLENOIDL-P



S16034-P



LAMP12VR



LAMP12VG

CORDEND



RC101



CORDGRIP.5

RCSEN



TB10AWG20A600V



TB10AWG20A-600V



ANTKIT



PS12VR

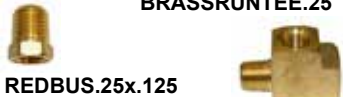
REDNIPPLE.25x.125



BRASS90

90NIPPLE

BRASSRUNTEE.25



REDBUS.25x.125



CONTROLVALVE

BRASSNIPPLE.25



SH2B05



RCBOARDDC



RCGR



RCGR2-SCORE



SY5120-5D-N7T_030



SY5420-5D-N7T



SY5120-6D-N7T



SY5420-6D-N7T



PTC-TEE-4T

PTC-STR-2MP-4T



MF04



MF02



EFITTING.25



UDR32-7



T12

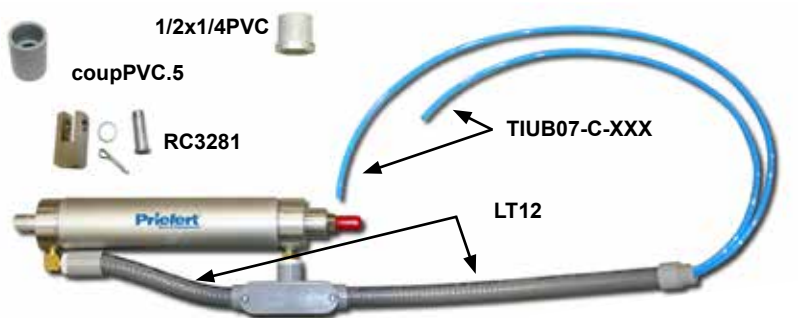


TA12

1/2x1/4PVC

coupPVC.5

RC3281



Air Cylinder Assembly

1-800-527-8616
903-572-1741 903-572-2798 Fax
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