AA-7
MECHANISM
ROSS PILOT
BSI PART 37450AMK

ROSS PILOT VALVE REBUILD KIT
BSI KIT K12274

ROSS MAIN CONTROL VALVE REPAIR KIT
1/4, 3/8 & 1/2
BSI 37887AMK

1/2, 3/4 & 1
BSI 37169AMK

1-1/4 & 1-1/2
BSI 37882AMK

INCLUDES QTY 1 EACH:
37450AMK, K12274, 37887AMK, 37169AMK & 37882AMK
Field Notes:
This kit rebuilds all Ross pilot valves, both new and old style.
It contains all gaskets, seals, & the poppet. Some parts may not be used depending on the
particular mechanism. Vintage of the valve, and adaptors used.
Completely clean all grease from the valve body.
Use care not to scratch the sealing surfaces.
Do not lubricate any internal parts of the pilot valve.
There should be only one spring in the pilot valve - it is located under the poppet as shown in the drawing.
If the seating surfaces are scored, then the valve must be replaced.

Time the breaker before (if possible) and after rebuilding the pilot valve.
Use item 23 & 24 for the Westinghouse style main control valve with adapter block.
Use items 17 for Ross main valves with ports 1" & smaller
Use items 18 & 22 for Ross main valves with ports larger than 1"

The internal parts (items 2, 4, 5, & 6) are the same for the old & new style
pilot valve bodies, but not illustrated above for the old style valve body.
Field Installation Note:
Cut smooth end to length in field
### Westinghouse AA-7 main control valve

**Assemble parts for AA-7**

Same as shown below for AA-10

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### Westinghouse AA-10 main control valve

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### Item No | BSI part # | Description | Qty |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>35</td>
<td>30525/37131AMK</td>
<td>gasket</td>
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<tr>
<td>36</td>
<td>37990AMK</td>
<td>adapter</td>
<td>1</td>
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<tr>
<td>37</td>
<td>2112470/37124AMK</td>
<td>o-ring</td>
<td>2</td>
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<td>38</td>
<td>37450AMK</td>
<td>Ross pilot valve</td>
<td>1</td>
</tr>
<tr>
<td>55</td>
<td>37144AMK</td>
<td>socket head cap screw, 1/4-20 x 1</td>
<td>2</td>
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<td>56</td>
<td>38599AMK</td>
<td>socket head cap screw, 3/8-16 x 1</td>
<td>2</td>
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<tr>
<td>57</td>
<td>37144AMK</td>
<td>lock washer, 3/8&quot;</td>
<td>2</td>
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<td>66</td>
<td>37145AMK</td>
<td>lock washer, 1/4&quot;</td>
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### Notes:
1. Always time the breaker before (if possible) and after replacing the pilot valve to ensure proper closing speed.
2. This kit is for use on the mechanisms listed below that are used on oil circuit breakers and the Westinghouse model 2560SF 05CB.
3. If replacing a Norgren pilot valve with an external pilot pressure feed into port "F" on the old Norgren pilot valve, remove and discard the pipe plug from port "X1" on the new Ross pilot valve and connect the external pilot pressure tubing to the port on the Ross pilot valve marked "X1". The port on the Ross pilot valve marked "X3" is the pilot exhaust and should always remain unplugged.
<table>
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<th>ITEM NO</th>
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<th>PART NO</th>
<th>DESCRIPTION</th>
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<tr>
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<td>37748AMK</td>
<td>Spring 1735863 / 1D81130H05 / 5086B49H06</td>
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<td>Valve Disc 1644478 / 24D9629H01 / 5086B49H03</td>
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<td>13</td>
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<td>Disc Support SST 1644475 / 22D6972H02 / 5086B49H12</td>
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<td>37753AMK</td>
<td>Elastic Stop Nut 1627043 / 70220DAN1B / 5086B49H11</td>
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<td>2</td>
<td>22343</td>
<td>O-ring 1644476 / 5492C46H19 / 5086B49H07</td>
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<td>37740AMK</td>
<td>Spring 1644473 / 202758H04 / 5086B49H04</td>
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<td>Piston Ring 1644477 / 534539 / 23B2997H31 / 5086B49H02</td>
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<td>37750AMK</td>
<td>Spring 1644424 / 23D2758H05 / 5086B49H05</td>
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<td>37747AMK</td>
<td>Locking Clip 1216890 / 6D89171H18 / 5086B49H09</td>
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<td>28</td>
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<td>30525 / 37131AMK</td>
<td>Gasket 1589256 / 1558B85H01 / 5086B49H08</td>
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</tbody>
</table>

**Kit to rebuild Westlinghouse AA-7 Main Control Valve**

**BREAKER SERVICE INC**
800-445-9020 office  800-267-7190 fax

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Complete Stem Assy Shown for Reference Only

Spring under stem in main control valve on AA-7 mechanism

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Rebuild instructions:
1. Do not proceed if you are not qualified for this work.
2. Make breaker & mechanism safe for work.
3. Disassemble and gently clean valve.
4. Reassemble using new seals per drawing.
5. Items 12 & 13 are used with older main valves.
6. Item 3 is used with newer main valves.
7. Take special note of the location of item 19.
8. Sparsingly lubricate orings with Parker Superlube.

BRAND NO. 15028
REV 0
Rebuild instructions:
1. Do not proceed if you are not qualified for this work.
2. Make breaker & mechanism safe for work.
3. Disassemble and gently clean valve.
4. Reassemble using new seals per drawing.
5. Items 3, 6 & 8 are common to both valves.
7. Discard unused parts.

Parts shown with item numbers are included in the rebuild kit.

Unique to D0042A

Unique to D0072A

D0042A Main Valve

Common to both valves

D0072A Main Valve
Assy includes nut, gasket, & gasket retainer cup for 1.05" O.D. pipe
Assy includes nut, gasket, & gasket retainer cup for 0.875" O.D. pipe.
3/4" Hose for AA-7 mechanisms on Westinghouse OCBs
Westinghouse part # 228633408

38035AMK

BREAKER SERVICE INC
800-826-5250 office  888-267-7090 fax
INSTRUCTIONS

THE FUNCTION OF THE LATCH CHECK SWITCH IS TO INSURE THAT THE MECHANISM IS COMPLETELY RETRIEVED AND THE TRIP FREE LATCH SYSTEM IS FULLY ENGAGED BEFORE ANY CLOSING OR RECLOSED OPERATION IS ATTEMPTED ELECTRICALLY.

BEFORE ATTEMPTING TO REPLACE THE SWITCH OPEN THE BREAKER AND ADJACENT DISCONNECT SWITCHES, DE-ENERGIZE ALL CONTROL AND AUXILIARY POWER. CLOSE THE MAIN HAND SHUTOFF VALVE BETWEEN THE RESERVOIR AND THE CONTROL VALVE. DEPRESS MOMENTARILY THE PUSHBUTTON ON THE PILOT VALVE TO EXHAUST THE HIGH PRESSURE AIR BETWEEN THE SHUTOFF VALVE AND CONTROL VALVE. INSURE THE MECHANISM IS IN THE OPEN POSITION BEFORE REMOVING THE OLD SWITCH AND MTG BRACKET. INSTALL THE NEW MTG BRACKET WITHOUT THE SWITCH USING THE OLD MTG HARDWARE. INSTALL THE NEW SWITCH IN THE BRACKET AND ADJUST THE HEIGHT SO THE SWITCH “MAKES” CONTACT .03 TO .06 IN. BEFORE THE TRIP FREE TRIGGER AND CATCH ARE IN THE RESET POSITION. LISTEN FOR AN AUDIBLE “CLICK” FROM THE SWITCH. WIRE TO THE “NORMALLY OPEN” AND “COMMON” TERMINALS. PICTURE ON THIS DRAWING SHOW TRIGGER IN THE RESET POSITION WITH THE TRIP FREE LATCH SYSTEM ENGAGED AND SWITCH PLUNGER DEPRESSED .03 TO .06 IN BEYOND CONTACT “MAKE” POSITION.
Complete valve shown for reference only. Valve body not included in repair kit.
White dot color code

48" long leads
Rachet action is 45 degrees counter clockwise when looking into the shaft. The lever arm is adjustable 360 degrees.

Replacement for:
GE # 0138A7031P1 - ATB breaker
GE # 0137A0180P6 - ATB breaker