CHECKLIST PORTER MXR NITROUS OXIDE Blender & Equipment

CHECK CONNECTIONS GAS HOSES BLUE (N20) WHITE (OXYGEN)
- Secure at back of Porter MXR N:O Blender
- Secure at the wall outlet
- Pin wheel to corresponding outlet
- White O2 to O2 & blue N:O to N:O

CHECK SCAVENGING SYSTEM YELLOW
- Yellow pin wheel secured at wall outlet
- Yellow tubing secure at base of Porter MXR N:O Blender
- Turn scavenger dial “ON” using yellow dial
- Suction is heard from the scavenger system

CHECK POSITIVE “ON/OFF SWITCH” WHITE OR GREEN
- Pull button towards the operator (front)
- Position the flow control knob to zero L/min & the concentration knob to zero %
- Turn the flow control knob up, the Porter MXR N:O Blender will not deliver gas when positive switch is “OFF”
- Preventing accidental delivery of gas
- Push in the “ON/ OFF SWITCH” for delivery

CHECK NITROUS OXIDE FAIL-SAFE SYSTEM
- Turn concentration control knob to 50% N:O
- There should be no flow (balls don’t move)
- Turn the flow control knob to 3-4 L/min 02
- N:O should flow proportionally to the O2
- Flow metre balls should at same height
- Interrupt the oxygen supply by loosening the oxygen pin wheel at the wall outlet
- The O2 gas will make a “hissing” noise
- The nitrous oxide fail-safe valve must initiate & the nitrous oxide flow (ball) drop as the oxygen flow (ball) drops (L/min)
- N:O flow must stop completely due to no oxygen (O2) supply, do not use if check fails
- Reconnect oxygen pin wheel to wall outlet
- Set concentration control knob to zero
- Set flow child 5-6L/min adolescent 6-8L/min

CHECK RESERVOIR BAG ATTACHED TO BAG CONNECTION
- The reservoir bag must be intact
- Inflate bag & Inspect - 3/4 full for delivery
- Replace bag** if cracked, torn or perforated
- Do not use tapes to repair the reservoir bag
- Do not tie or modify the reservoir bag

CHECK CIRCUIT CONNECTION
- Use disposable patient circuit
- Check circuit intact & complete
- Connect blue limb to front - fresh gas outlet
- Connect pink limb to side - return & scavenger
- Ensure appropriate size face mask
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO OXYGEN &amp; OR NITROUS OXIDE GAS FLOW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>POSITIVE &quot;ON/OFF&quot; SWITCH OFF</td>
<td>TURN POSITIVE &quot;ON/OFF SWITCH&quot; TO &quot;ON&quot; POSITION = PUSH IN</td>
</tr>
<tr>
<td></td>
<td>GAS SUPPLY NOT CONNECTED CORRECTLY, INTERRUPTION OR LEAK IN THE GAS SUPPLY</td>
<td>CHECK OXYGEN &amp; NITROUS OXIDE CONNECTIONS AT THE WALL PANEL &amp; BACK OF PORTER MXR N2 BLENDER</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IF NOT RESOLVED IMMEDIATELY, STOP PROCEDURE, GIVE OXYGEN</td>
</tr>
<tr>
<td><strong>NITROUS OXIDE FLOW METRE WORKING BUT NO OXYGEN FLOW OBSERVED IN OXYGEN FLOW METRE</strong></td>
<td>FAILSAFE MECHANISM MALFUNCTION</td>
<td>REMOVE PORTER MXR N2 BLENDER FROM CLINICAL AREAS IMMEDIATELY, SEND TO RCH BIOMEDICAL ENGINEERING</td>
</tr>
<tr>
<td><strong>GAS LEAKING FROM THE POSITIVE SWITCH ON/OFF</strong></td>
<td>DAMAGE TO THE &quot;O&quot; RING INSIDE THE ON/OFF SWITCH</td>
<td>REMOVE PORTER MXR N2 BLENDER FROM CLINICAL AREAS IMMEDIATELY, SEND TO RCH BIOMEDICAL ENGINEERING</td>
</tr>
<tr>
<td><strong>GAS LEAKING AROUND THE OXYGEN OR NITROUS OXIDE PIN WHEEL OR HOSE AT THE WALL</strong></td>
<td>DAMAGE TO THE PIN WHEEL THREADS OR THE GAS HOSE</td>
<td>REMOVE PORTER MXR N2 BLENDER FROM CLINICAL AREAS IMMEDIATELY, SEND TO RCH BIOMEDICAL ENGINEERING</td>
</tr>
<tr>
<td><strong>RESERVOIR BAG FAILS TO INFLATE</strong></td>
<td>INADEQUATE GAS FLOW PATIENT HYPERVENTILATING RESERVOIR BAG DAMAGED</td>
<td>TURN FLOW CONTROL KNOB UP COACH PT TO SLOW BREATHING REMOVE &amp; REPLACE** DAMAGED RESERVOIR BAG IF NOT RESOLVED IMMEDIATELY, STOP PROCEDURE, GIVE OXYGEN</td>
</tr>
<tr>
<td><strong>RESERVOIR BAG OVERINFLATING</strong></td>
<td>CIRCUIT CONNECTION INCORRECT GAS FLOW TOO HIGH PATIENT HYPOVENTILATING</td>
<td>CHECK CIRCUIT NOT REVERSED TURN FLOW CONTROL KNOB DOWN REDUCE N2 CONCENTRATION % ASSESS &amp; MANAGE PATIENTS RESPIRATORY EFFORT &amp; UMSS IF NOT RESOLVED IMMEDIATELY, STOP PROCEDURE, GIVE OXYGEN</td>
</tr>
<tr>
<td><strong>HIGH PITCH WHISTLE SOUND</strong></td>
<td>EMERGENCY AIR VALVE INITIATED DUE TO LOSS IN OXYGEN GAS FLOW/ SOURCE</td>
<td>CHECK OXYGEN AND NITROUS OXIDE CONNECTIONS AT THE WALL PANEL &amp; BACK OF PORTER MXR N2 BLENDER</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IF NOT RESOLVED IMMEDIATELY, STOP PROCEDURE, GIVE OXYGEN</td>
</tr>
</tbody>
</table>

**REMOVE PORTER MXR N2 BLENDER FROM CLINICAL AREAS IMMEDIATELY, SEND TO RCH BIOMEDICAL ENGINEERING IF FAULTY**

**Replacement bags Level 3 West Zone N Desk 1216/17 CKP Nitrous oxide equipment Black Box**

Contact Kate Austin ext 55776 p7933 email kate.austin@rch.org.au or Karin Plummer ext 55772 p7932