



**Medtronic**

# MIDAS REX<sup>®</sup> MR7

Pneumatic High-Speed System



Instruction Manual

Rx Only

## General Information

---

Read and understand this manual before use of the MR7 System.

The **Midas Rex**® MR7 system is designed for use by medical professionals familiar with powered surgical instrumentation. The surgeon is responsible for learning the proper techniques in the use of this system, as inappropriate use may potentially be harmful. It is strongly recommended that the surgeon and dedicated operating room personnel are knowledgeable with the use of this equipment by being trained in Medtronic Midas Rex Hands-On Workshops or by one of the local authorized representatives.

The MR7 system consists of the following components:

- MR7 or MR7 Touch Motor
- MR7 Pneumatic Control Unit with Various Connectors
- MR7 Regulator Hose
- MR7 Lubricant/Diffuser Cartridge
- MR7 Triton® Adapter (optional)
- Legend® Attachments\*
- Legend® Dissecting Tools\*

\*The MR7 system uses the same attachments and dissecting tools as the Legend® Pneumatic High-Speed System.

## Indications for Use

The Medtronic **Midas Rex** MR7 System is a pneumatically operated surgical instrument system. The pneumatic motors provide power to operate removable rotating surgical cutting tools and their accessories intended for use in neurosurgery, including craniotomy and spinal surgery; as well as Ear, Nose and Throat (ENT), orthopedic and general surgical applications including maxillofacial, craniofacial and sternotomy surgeries.

## Contraindications

None

## Special Notices

The words warning, caution and note have special meanings in this manual, and should be carefully reviewed:


**WARNING:** A warning indicates that the personal safety of the patient or physician may be involved. Disregarding this information could result in injury to the patient or physician.

**CAUTION:** A caution indicates that there is a risk of damaging equipment.

**NOTE:** A note is intended to provide additional information, which may be useful, but is not essential to complete the procedure.

## General Safety Precautions

### WARNINGS:

- Do not use the Midas Rex MR7 System before proper cleaning and sterilization.
- Do not operate the Midas Rex MR7 System in the presence of Magnetic Resonance Imaging devices.
- Do not use damaged, faulty, or modified Midas Rex MR7 System components. Inspect the Midas Rex MR7 System for damage prior to each use:
  - Check the motor's exhaust hose for cracks or tears.
  - Visually inspect attachments and tools. Do not use bent or damaged tools.
  - Install attachment and dissecting tool, then briefly run motor.
    - \* Check motor for overheating and leaking lubricant.
    - \* Check attachment for overheating.
    - \* Check dissecting tool for flail.
- Do not operate the **Midas Rex** MR7 System without eye protection.
- Motors and attachments which fail due to extended use may allow a component to detach and fall from the motor or attachment, and may cause patient injury.
- Heavy side loads and/or long operating periods may cause the device to overheat. If overheating occurs:
  - Never place an overheated motor on the patient or draping during surgery.
  - Discontinue use and rest the motor by using intermittently, or wrap the motor/attachment interface with a moist sterile towel.
  - If the motor is passed off, the receiver should grasp the motor by the proximal end close to the motor hose.
- To avoid injury to the patient or user, do not place the handpiece on the patient or in an unsecured location, when not in use.
- Midas Rex MR7 motors should only be operated when the attachment is in the  position.

If a dissecting tool package is opened, but the tool is not used or contaminated, the tool can be re-sterilized by steam sterilization. Remove tool from all original packaging and place into an approved autoclave package. Steam sterilize as follows:

**High Vacuum Steam:** 270° F (132° C) for 5 minutes

**Gravity Displacement:** 270° F (132° C) for 15 minutes

The re-sterilized tool must be used promptly following re-sterilization. If rust or corrosion is encountered after re-sterilization, do not use the re-sterilized tool.

## No Latex Policy

Legend and MR7 products, packaging materials, labels, package inserts, and similar items manufactured by and/or for Medtronic Powered Surgical Solutions (MPSS) do not contain latex.

**WARNING:** Use only Medtronic **Midas Rex** Legend or MR7 devices with an MR7 motor. Use of other devices may cause injury or damage equipment, and will void the manufacturer's warranty.

### Pneumatic Control Unit

The pneumatic control unit (Figure 3) provides variable speed motor control through a foot pedal. It also allows the user to switch between finger and foot control of the motor (if applicable).

### Regulator

The regulator (Figure 4) controls the delivery pressure of compressed gas to the pneumatic control unit. The pressure gauges monitor cylinder pressure (right gauge) and delivery pressure (left gauge).

**Note:** Outlet pressure gauge accurate to +/- 12 psi.

### Instrument Case

The instrument case (Figure 5) is used to organize equipment.

### Regulator Hose

Connects from the gas source to the pneumatic control unit to deliver compressed gas.

**Figure 3:** Pneumatic Control Unit



**Figure 4:** Regulator



**Figure 5:** Instrument Case



## N2 DISS to Male Schrader Adapter

The N2 DISS to male Schrader adapter (Figure 6) allows for the regulator hose to be attached to a female Schrader in-house gas connection. A N2 DISS to female Schrader adapter is also available for connection of the regulator hose to a male Schrader in-house gas connection.

**Figure 6:** N2 DISS to Male Schrader Adapter



## N2 DISS to Air DISS Adapter

The N2 DISS to air DISS adapter (Figure 7) allows for the regulator hose to be attached to an Air DISS in-house gas connection.

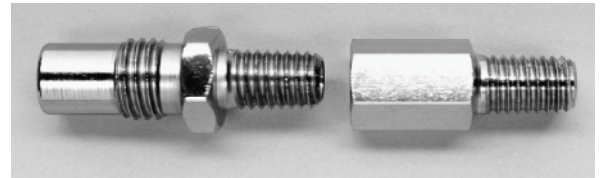
**Figure 7:** N2 DISS to Air DISS Adapter



## N2 DISS to WF4 Adapter

The N2 DISS to WF4 adapter (Figure 8) allows for the regulator hose to be attached to a **Midas Rex** safety valve regulator previously used for Midas Rex Classic or Midas Rex III motors. The in-line oiler must be removed from the safety valve regulator.

**Figure 8:** N2 DISS to WF4 Adapter



## Motor Wrench

The motor wrench (Figure 9) is used to align arrows on motor collet flats prior to installation of a Legend attachment.

**Figure 9:** Motor Wrench



## Triton Adapter

The Triton adapter (Figure 10) allows the Triton handpiece to be driven by the MR7 pneumatic control unit. It functions much the same way as the Triton port on the Legend pneumatic control unit, except that it is connected between the control unit and the gas source, rather than being integrated into the control unit.

**Figure 10:** Triton Adapter

