

Graseby MS16A Syringe Driver

Competency Checklist

simms GRASEBY

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GRASEBY MS16A SYRINGE DRIVER

COMPETENCY CHECK LIST - STAGE 1/LEVEL 1

Name: Title:.....

Hospital/Dept: Expected date of completion:

Competency Statement: Participant will demonstrate proper practical knowledge, theory of operation and clinical application of the Graseby MS16A Syringe Driver

Performance Criteria	Evaluation Method	Achieved/Not Achieved	Date	Assessor
<p>The participant will be able to:</p> <p>1. <u>Demonstrate pre-operational inspection and proper set-up of the MS16A</u></p> <p>a) Define the type of pump utilised, and explain the difference between an MS16A and MS26.</p> <p>b) Define the application for usage of this Syringe Driver.</p> <p>c) Identify the components on the Syringe driver that secures the syringe and explain their function.</p> <p>d) Install the battery.</p> <p>e) Explain why the alarm sounds when battery is inserted.</p> <p>f) Demonstrate the motor safety circuits are operating by holding down the Start/Test button.</p> <p>g) Explains which sizes of syringe can be used.</p> <p>h) Connect the syringe to the infusion line and explains why a luer lock should be used</p> <p>i) Prime the infusion line.</p>	<p>a) Questioning</p> <p>b) Questioning</p> <p>c) Direct observation/Questioning</p> <p>d) Direct observation</p> <p>e) Questioning</p> <p>f) Direct observation</p> <p>g) Questioning</p> <p>h) Direct observation/Questioning</p> <p>i) Direct observation</p>	<p>a)</p> <p>b)</p> <p>c)</p> <p>d)</p> <p>e)</p> <p>f)</p> <p>g)</p> <p>h)</p> <p>i)</p>	<p>a)</p> <p>b)</p> <p>c)</p> <p>d)</p> <p>e)</p> <p>f)</p> <p>g)</p> <p>h)</p> <p>i)</p>	<p>a)</p> <p>b)</p> <p>c)</p> <p>d)</p> <p>e)</p> <p>f)</p> <p>g)</p> <p>h)</p> <p>i)</p>

GRASEBY MS16A SYRINGE DRIVER
COMPETENCY CHECK LIST - STAGE 1/LEVEL 2

Performance Criteria	Evaluation Method	Achieved/Not Achieved	Date	Assessor
The participant will be able to:				
2. <u>Demonstrate the ability to operate the MS16A</u>				
a) Measure the syringe fluid length against the scale on the Syringe driver.	a) Direct observation	a)	a)	a)
b) State the type of unit measurement that is utilised.	b) Questioning	b)	b)	b)
c) Explain why this type of unit of measurement is utilised.	c) Questioning	c)	c)	c)
d) Calculate and set the infusion rates for the following periods:	d) Direct observation	d)	d)	d)
i)	1 Hrs.	i)		
ii)	6 Hrs.	ii)		
iii)	12 Hrs.	iii)		
iv)	24 Hrs	iv)		
e) Insert the syringe.	e) Direct observation	e)	e)	e)
f) Fit plastic cover if utilised.	f) Direct observation	f)	f)	f)
g) Start the infusion.	g) Direct observation	g)	g)	g)
h) Explain what the indicator light shows.	h) Questioning	h)	h)	h)
i) Stop the infusion.	i) Direct observation/Questioning	i)	i)	i)
3. <u>Monitoring an infusion in progress</u>				
a) Measure the length of fluid in the syringe whilst secured on the Syringe driver using an appropriate rule or gauge.	a) Questioning	a)	a)	a)
b) Chart the remaining fluid length and give a brief estimate of the Infusion Time remaining.	b) Direct observation/Questioning	b)	b)	b)

GRASEBY MS16A SYRINGE DRIVER
COMPETENCY CHECK LIST - STAGE 1/LEVEL 3

Performance Criteria	Evaluation Method	Achieved/Not Achieved	Date	Assessor
<p>The participant will be able to:</p> <p>4. <u>Review MS16A maintenance/trouble shooting considerations and appropriate action</u></p> <p>a) Review care and cleaning of the Syringe Driver.</p> <p>b) Review battery life and type.</p> <p>c) Explain possible causes for the following:</p> <p> i) The infusion ended early.</p> <p> ii) The infusion has ended late.</p> <p> iii) The Infusion has stopped.</p> <p> iv) The Syringe Driver will not start.</p> <p> v) The infusion has completed, but the motor is still running. The indicator light still flashes and there is a periodic click.</p> <p> vi) The indicator light is no longer flashing but the motor runs.</p> <p>d) State the conditions which will cause the syringe driver to alarm.</p>	<p>a) Questioning</p> <p>b) Questioning</p> <p>c)</p> <p> i) Questioning</p> <p> ii) Questioning</p> <p> iii) Questioning</p> <p> iv) Questioning.</p> <p> v) Questioning.</p> <p> vi) Questioning</p> <p>d) Questioning</p>	<p>a)</p> <p>b)</p> <p>c)</p> <p> i)</p> <p> ii)</p> <p> iii)</p> <p> iv)</p> <p> v)</p> <p> vi)</p> <p>d)</p>	<p>a)</p> <p>b)</p> <p>c)</p> <p> i)</p> <p> ii)</p> <p> iii)</p> <p> iv)</p> <p> v)</p> <p> vi)</p> <p>d)</p>	<p>a)</p> <p>b)</p> <p>c)</p> <p> i)</p> <p> ii)</p> <p> iii)</p> <p> iv)</p> <p> v)</p> <p> vi)</p> <p>d)</p>

GRASEBY MS16A SYRINGE DRIVER
COMPETENCY CHECK LIST - STAGE 1

Comments:

Level 1

Level 2

Level 3

Signature of Assessor: Date:

Signature of Participant: Date:

GRASEBY MS16A SYRINGE DRIVER
ASSESSOR'S PERFORMANCE CRITERIA
COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 1

Performance Criteria	Intended Answer/Outcome
<p>The participant will be able to:</p> <p>1. <u>Demonstrate pre-operational inspection and proper set-up of MS16A</u></p> <p>a) Define the type of pump utilised and explain the difference between an MS16A and MS26.</p> <p>b) Define the application for usage of the Syringe driver.</p> <p>c) Identify the components on the Syringe driver that secures the syringe and explain their function.</p> <p>d) Install battery.</p> <p>e) Explain why alarm sounds when battery is inserted.</p> <p>f) Demonstrate the motor safety circuits are operating by holding down the Start/Test button, and understands this.</p> <p>g) Identify sizes of syringes.</p> <p>h) Connect syringe and infusion line as appropriate for application. Explanation of the reasons for luer lock syringes</p> <p>i) Prime the infusion line.</p>	<p>a) The MS16A is SIMS Graseby's HOURLY rate Syringe Driver and is intended for administrations for periods of up to 24 hours. The MS26 is the DAILY rate Syringe Driver, is slower, and is intended for administrations over periods of 24 hours or more.</p> <p>b) Defines the area of application the Syringe driver is being used for i.e. Terminal Care, Heparin or Chemotherapy, Intravenously or Subcutaneously.</p> <p>c) Identifies the components and explains their function. Securing strap to retain syringe in place. Slot in case to retain syringe barrel finger grip. Finger on actuator to retain syringe plunger.</p> <p>d) Installs battery correctly.</p> <p>e) This indicates correct/normal position.</p> <p>f) Currently demonstrates the procedure for checking that the motor safety circuits are operating and understands the reason for performing this.</p> <p>g) Can use 5 ml, 10 ml, 20 ml, 30 ml, and 35 ml syringes.</p> <p>h) Performs correct procedure for connecting syringe to the infusion line. Luer locks are safer and prevent accidental disconnection.</p> <p>i) Correctly performs procedure for priming the infusion line.</p>

GRASEBY MS16A SYRINGE DRIVER
ASSESSOR'S PERFORMANCE CRITERIA
COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 2

Performance Criteria	Intended Answer/Outcome
<p>The participant will be able to:</p> <p>2. <u>Demonstrate the ability to operate the MS16A</u></p> <p>a) Measure the syringe fluid length against the scale on the Syringe driver</p> <p>b) State the type of unit of measurement that is utilised.</p> <p>c) Explain why this type of measurement is utilised.</p> <p>d) Calculate and set the infusion rates for the following periods:</p> <p>i) 1 Hrs.</p> <p>ii) 6 Hrs.</p> <p>iii) 12 Hrs.</p> <p>iv) 24 Hrs</p> <p>e) Insert the syringe.</p> <p>f) Fits plastic cover if utilised.</p> <p>g) Start the infusion.</p> <p>h) Explain what indicator light shows.</p> <p>i) Stop the infusion.</p> <p>3. <u>Monitoring an infusion in progress</u></p> <p>a) Measure the fluid in the syringe without removing it from the Syringe driver.</p> <p>b) Chart the fluid length remaining and estimate the infusion time remaining.</p>	<p>a) Correctly measures the fluid length in the syringe against the scale.</p> <p>b) Scale length measured in <u>Millimetres</u>.</p> <p>c) This allows the Syringe Driver to accomodate different brands and sizes of syringe which have <u>different scale lengths for the same volume</u>.</p> <p>d) Calculates and sets the infusion rates correctly i.e. <u>Scale length measured in MILLIMETRES</u> TIME IN HOURS</p> <p>MS16A calibrated in mm/Hour</p> <p>i) _____</p> <p>ii) _____</p> <p>iii) _____</p> <p>iv) _____</p> <p>Correct rate for syringe measured in 2 a)</p> <p>e) Inserts the syringe correctly.</p> <p>f) Fits the plastic cover correctly if utilised.</p> <p>g) Starts the infusion.</p> <p>h) Flashes once a second to show normal operation and battery has enough life in it to complete infusion.</p> <p>i) Knows how to stop the infusion <u>completely</u>, by removing syringe or removing battery and is aware that there is <u>no off</u> switch.</p> <p>a) Using an appropriate rule or gauge the participant must measue the fluid length in the syringe without removing the syringe from the Syringe driver.</p> <p>b) They must be able to accurately chart the fluid length remaining and assess the Infusion Time remaining.</p>

GRASEBY MS16A SYRINGE DRIVER
ASSESSOR'S PERFORMANCE CRITERIA
COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 3

Performance Criteria	Intended Answer/Outcome
<p>The participant will be able to:</p> <p>3. <u>Review MS16A maintenance/trouble shooting considerations and appropriate action</u></p> <p>a) Review care and cleaning of the Syringe driver.</p> <p>b) Review battery life and type.</p> <p>c) Explain why the following occur:</p> <p style="padding-left: 40px;">i) The infusion has ended early.</p> <p style="padding-left: 40px;">ii) The infusion has ended late.</p> <p style="padding-left: 40px;">iii) The infusion stopped.</p> <p style="padding-left: 40px;">iv) The Syringe Driver will not start.</p> <p style="padding-left: 40px;">v) The infusion has completed but the motor is still running and there is no alarm. The indicator light still flashes and there is a periodic click.</p> <p style="padding-left: 40px;">vi) The indicator light is no longer flashing, but the motor runs.</p>	<p>a) Explains procedure for care and cleaning of the Syringe Driver. <u>Not to be immersed in any solution.</u> Is aware of the procedure if the Syringe Driver does get wet.</p> <p>b) Alkaline 9V battery. Battery life approximately 50 full syringes.</p> <p>c)</p> <p style="padding-left: 40px;">i) Delivered dose too quickly because:</p> <p style="padding-left: 80px;">* Incorrect rate setting.</p> <p style="padding-left: 80px;">* Scale length measured incorrectly.</p> <p style="padding-left: 40px;">ii) Infusion ended late because:</p> <p style="padding-left: 80px;">* Incorrect rate setting.</p> <p style="padding-left: 80px;">* Scale length measured incorrectly.</p> <p style="padding-left: 40px;">iii) The infusion stopped because:</p> <p style="padding-left: 80px;">* Blockage in the line.</p> <p style="padding-left: 80px;">* Battery exhausted.</p> <p style="padding-left: 40px;">iv) The Syringe driver will not start because:</p> <p style="padding-left: 80px;">* Battery inserted incorrectly.</p> <p style="padding-left: 80px;">* Battery exhausted.</p> <p style="padding-left: 80px;">* Start/Test button not depressed sufficiently.</p> <p style="padding-left: 40px;">v) The mechanism for pushing the syringe plunger has worn out and is slipping causing the click. This is therefore a fault and the unit should be returned to a qualified engineer.</p> <p style="padding-left: 40px;">vi) This is because the battery <u>needs replacing.</u></p>

GRASEBY MS16A SYRINGE DRIVER
ASSESSOR'S PERFORMANCE CRITERIA
COMPETENCY CHECK LIST GUIDELINES - STAGE 1/LEVEL 3 cont . . .

Performance Criteria	Intended Answer/Outcome
<p>d) State the conditions which will cause the Syringe driver to alarm.</p>	<p>d) * End of infusion. * Blocked line * Could also be the infusion conditions</p> <ul style="list-style-type: none"> • Solution too viscous • Line too narrow • Rate too fast for application <p>* When battery is first inserted. * When Start/Test button is held down for 5 seconds. * Syringe Driver faulty.</p>

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