

Table of Contents[®]

UNIT 1 System Introduction

<i>OBJECTIVE</i> -----	1-1
<i>DISCUSSION</i> -----	1-1

UNIT 2 Conveyor Belt Position Control

<i>OBJECTIVE</i> -----	2-1
<i>DISCUSSION</i> -----	2-1
<i>EQUIPMENT REQUIRED</i> -----	2-8
<i>PROCEDURE</i> -----	2-8
<i>PROBLEM</i> -----	2-10

UNIT 3 Workpiece Detecting and Sorting

<i>OBJECTIVE</i> -----	3-1
<i>DISCUSSION</i> -----	3-1
<i>EQUIPMENT REQUIRED</i> -----	3-11
<i>PROCEDURE</i> -----	3-11
<i>PROBLEM</i> -----	3-14

UNIT 4 Z-Axis Cylinder Up/Down Control

<i>OBJECTIVE</i> -----	4-1
<i>DISCUSSION</i> -----	4-1
<i>EQUIPMENT REQUIRED</i> -----	4-10
<i>PROCEDURE</i> -----	4-10
<i>PROBLEM</i> -----	4-12

UNIT 5 Rotary Cylinder Right/Left Control

<i>OBJECTIVE</i> -----	5-1
<i>DISCUSSION</i> -----	5-1
<i>EQUIPMENT REQUIRED</i> -----	5-8
<i>PROCEDURE</i> -----	5-8
<i>PROBLEM</i> -----	5-10

UNIT 6 Vacuum Generator Control

OBJECTIVE-----6-1
DISCUSSION-----6-1
EQUIPMENT REQUIRED-----6-13
PROCEDURE-----6-13
PROBLEM-----6-15

UNIT 7 Slide Table Position Control

OBJECTIVE-----7-1
DISCUSSION-----7-1
EQUIPMENT REQUIRED-----7-15
PROCEDURE-----7-15
PROBLEM-----7-18

UNIT 8 3-Axis Pick & Place Robot Control

OBJECTIVE-----8-1
DISCUSSION-----8-1
EQUIPMENT REQUIRED-----8-23
PROCEDURE-----8-23
PROBLEM-----8-27

UNIT 9 Picking and Placing on Conveyor Belt

OBJECTIVE-----9-1
DISCUSSION-----9-1
EQUIPMENT REQUIRED-----9-22
PROCEDURE-----9-22
PROBLEM-----9-26

UNIT 10 Storing Workpieces Sequentially

OBJECTIVE-----10-1
DISCUSSION-----10-1
EQUIPMENT REQUIRED-----10-29
PROCEDURE-----10-29
PROBLEM-----10-34

UNIT 11 Workpiece Sorting and Storing Control

<i>OBJECTIVE</i> -----	11-1
<i>DISCUSSION</i> -----	11-1
<i>EQUIPMENT REQUIRED</i> -----	11-30
<i>PROCEDURE</i> -----	11-30
<i>PROBLEM</i> -----	11-35

UNIT 12 Conveyor Loading Control

<i>OBJECTIVE</i> -----	12-1
<i>DISCUSSION</i> -----	12-1
<i>EQUIPMENT REQUIRED</i> -----	12-28
<i>PROCEDURE</i> -----	12-28
<i>PROBLEM</i> -----	12-32

UNIT 13 Automatic Loading-Unloading Control

<i>OBJECTIVE</i> -----	13-1
<i>DISCUSSION</i> -----	13-1
<i>EQUIPMENT REQUIRED</i> -----	13-39
<i>PROCEDURE</i> -----	13-39
<i>PROBLEM</i> -----	13-47