



Tool Operating Manual

i04619069

1U-9600 Welding Group (U.S. and Canada) 1U-9601 Welding Group (All other countries)

SMCS Code: 0599; 0679

Caterpillar Products
All

Table of Contents

Introduction	1
Literature Information	2
Safety Section	2
General Information Section	2
Operation Section	2
Maintenance Section	3
Service Parts Section	3
Safety Icon Nomenclature	3
Personal Protection/Important Information	3
Prohibited Action	3
Hazard Avoidance	3
Safety Section	3
General Information	4
Introduction	4
Additional Contact Information	5
Setup Procedure	5
Selecting Power Setting of Base Unit	5
Position the Base Unit	6
Weld Head Assembly	6
Weld Torch Assembly	7
Assemble the Torch	8
Splicing Teflon Liners	10
Welding Procedure	10
Prepare Welding Surface	10
Position Weld Torch	10
Final Preparation and Welding	10
Weld Completion	11
Disassembly	12
Other Features	12
Maintenance and Repair	12
Check for Wear	12
Fuses	13
1U-9633Transformer	13

1U-9602Magnets	13
Top Casting	14
Speed Control Assembly	14
Drive Motor	14
Head and Clutch Assembly	15
Disassembly and Assembly	15
1U-9603Head and Clutch Unit	16
Disassembly	16
Assembly and Adjustment	18
1U-9634Drive Motor	19
1U-9632Gear and Clutch Assembly	19
Disassembly	19
Check for Proper Operation	19
Final Adjustment	20
1U-9628Brush Housing	21
Disassembly	21
Brush Assembly and Spring Adjustment	21
9U-5134Brush Housing	22
Disassembly	22
Brush Assembly and Spring Adjustment	23
1U-9616Speed Control Assembly	23
Metric Tap and Die Sets	23
Parts Listing	24
Base Assembly	24
1U-9633Transformer Assembly	25
1U-9610Coil Cord	26
Transmission Housing Assembly	26
1U-9616Speed Control Assembly	28
Torch Assembly	30
Miscellaneous Parts	31
Warranty	31
Troubleshooting	32
Weld Parameters	33
Potentiometer Settings	33
Instructions for Use of Charts	33
Weld Torch Settings	36

Introduction

Important Safety Information