

MANUAL NO:U10050/U10051-1



OWNER'S MANUAL

FOR

WIRE FEEDER

MODEL: CMXL-231U U10050
 CMXL-231U U10051

DO NOT DESTROY

IMPORTANT: Read and understand the entire contents of this manual, with special emphasis on the safety material throughout the manual, before installing, operating, or maintaining this equipment. This equipment and this manual are for use only by persons trained and experienced in the safety operation of welding equipment. Do not allow untrained persons to install, operate or maintain this equipment. Contact your distributor if you do not fully understand this manual.

DAIHEN Corporation WELDING PRODUCTS DIVISION

January 13, 2010

Upon contact, advise MODEL and MANUAL NO.

Notice : Machine export to Europe

This product does not meet the requirements specified in the EC Directives which are the EU safety ordinance that was enforced starting on January 1, 1995. Please make sure that this product is not allowed to bring into the EU after January 1, 1995 as it is.

The same restriction is also applied to any country which has signed the EEA accord.


Please ask us before attempting to relocate or resell this product to or in any EU member country or any other country which has signed the EEA accord.


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1. SAFETY INFORMATION

The following safety alert symbols and signal words are used throughout this manual to identify various hazards and special instructions.


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|  WARNING | WARNING gives information regarding possible personal injury or loss of life. |
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|  CAUTION | CAUTION refers to minor personal injury or possible equipment damage. |
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2. ARC WELDING SAFETY PRECAUTIONS


| |
|--|
|  WARNING |
| ARC WELDING can be hazardous. |
| 1. PROTECT YOURSELF AND OTHERS FROM POSSIBLE SERIOUS INJURY OR DEATH. Be sure to: <ul style="list-style-type: none">• Keep children away.• Keep pacemaker wearers away until consulting a doctor. |
| 2. Read and understand the summarized safety information given below and the original principal information that will be found in the PRINCIPAL SAFETY STANDARDS. |
| 3. Have only trained and experienced persons perform installation, operation, and maintenance of this equipment. |
| 4. Use only well maintained equipment. Repair or replace damaged parts at once. |
| ARC WELDING is safe when precautions are taken. |


2. ARC WELDING SAFETY PRECAUTIONS (continued)

| | |
|--|---------------------------------|
|  | ELECTRIC SHOCK can kill. |
| <p>Touching live electrical parts can cause fatal shocks or severe burns. The electrode and work circuits are electrically live whenever the output is on. The power line and internal circuits of this equipment are also live when the line disconnect switch is on. When arc welding all metal components in the torch and work circuits are electrically live.</p> <ol style="list-style-type: none">1. Do not touch live electrical parts.2. Wear dry insulating gloves and other body protection that are free of holes.3. Insulate yourself from work and ground using dry insulating mats or covers.4. Be sure to disconnect the line disconnect switch before installing, changing torch parts or maintaining this equipment.5. Properly install and ground this equipment according to its Owner's Manual and national, state, and local codes.6. Keep all panels and covers of this equipment securely in place.7. Do not use worn, damaged, undersized, or poorly spliced cables.8. Do not touch electrode and any metal object if POWER switch is ON.9. Do not wrap cables around your body.10. Turn off POWER switch when not in use. | |


| | |
|--|---|
|  | ARC RAYS can burn eyes and skin: FLYING SPARKS AND HOT METAL can cause injury. NOISE can damage hearing. |
| <p>Arc rays from the welding process produce intense heat and strong ultraviolet rays that can burn eyes and skin.</p> <p>Noise from some arc welding can damage hearing.</p> <ol style="list-style-type: none">1. Wear face shield with a proper shade of filter (See ANSI Z 49.1 listed in PRINCIPAL SAFETY STANDARDS) to protect your face and eyes when welding or watching a welder work.2. Wear approved safety goggles. Side shields recommended.3. Use protective screens or barriers to protect others from flash and glare: warn others not to look at the arc.4. Wear protective clothing made from durable, flame-resistant material (wool and leather) and foot protection.5. Use approved earplugs or earmuffs if noise level is high. Chipping and grinding can cause flying metal. As welds cool, they can throw off slag.6. Wear approved face shield or safety goggles. Side shields recommended.7. Wear proper body protection to protect skin. | |


2. ARC WELDING SAFETY PRECAUTIONS (continued)

| | |
|--|---|
|  | <p>WELDING can cause fire and explosion.</p> |
| <p>Sparks and spatter fly off from the welding arc. The flying sparks and hot metal, spatter, hot base metal, and hot equipment can cause fire and explosion. Accidental contact of electrode or welding wire to metal object can cause sparks, overheating, or fire.</p> <ol style="list-style-type: none"> 1. Protect yourself and others from flying sparks and hot metals. 2. Do not weld where flying sparks can strike flammable material. 3. Remove all flammables within 10m (33ft) of the welding arc. If this is not possible, tightly, cover them with approved covers. 4. Be alert that welding sparks and hot metals from welding can easily pass through cracks and openings into adjacent areas. 5. Watch for fire, and keep a fire extinguisher nearby. 6. Be aware that welding on a ceiling, floor, bulkhead, or partition can ignite a hidden fire. 7. Do not weld on closed containers such as tanks or drums. 8. Connect base metal side cable as close to the welding area as possible to prevent the welding current from traveling along unknown paths and causing electric shock and fire hazards. 9. Remove stick electrode from holder or cut off welding wire at contact tip when not in use. 10. Does not use the welding power source for other than arc welding. 11. Wear oil-free protective garments such as leather gloves, a heavy shirt, cuffless trousers, boots, and a cap. 12. A loose cable connection can cause sparks and excessive heating. 13. Tighten all cable connections. 14. When there is an electrical connection between a work piece and the frame of wire feeder or the wire reel stand, are may be generated and cause damage by a fire if the wire contacts the frame or the work piece. | |


| | |
|---|--|
|  | <p>FUMES AND GASES can be hazardous to your health.</p> |
| <p>Arc welding produce fumes and gases. Breathing these fumes and gases can be hazardous to your health.</p> <ol style="list-style-type: none"> 1. Keep your head out of the fumes. Do not breathe the fumes. 2. Ventilate the area and/or use exhaust at the arc to remove welding fumes and gases. 3. If ventilation is poor, use an approved air-supplied respirator. 4. Read the Material Safety Data Sheets (MSDS) and the manufacturer's instructions on metals, consumables, coatings, and cleaners. 5. Do not weld or cut in locations near degreasing, cleaning, or spraying operations. The heat and rays of the arc can react with vapors to form highly toxic and irritating gases. 6. Work in a confined space only if it is well ventilated, or while wearing an air-supplied respirator. Shielding gases used for welding can displace air causing injury or death. Be sure the breathing air is safe. | |

2. ARC WELDING SAFETY PRECAUTIONS (continued)

| | |
|---|--|
|  | <p>CYLINDER can explode if damaged.</p> |
| <p>A shielding gas cylinder contains high-pressure gas. If damaged, a cylinder can explode. Since gas cylinders are normally part of the welding process, be sure to treat them carefully.</p> <ol style="list-style-type: none"> 1. Use only correct shielding gas cylinders, gas regulator, hoses, and fittings designed for the specific application; maintain them in good condition. 2. Protect compressed gas cylinders from excessive heat, mechanical shock, and arcs. 3. Keep the cylinder upright and securely chained to a stationary support or a rack to prevent falling or tipping. 4. Keep cylinders away from any welding or other electrical circuit. 5. Never touch cylinder with welding electrode. 6. Read and follow instructions on compressed gas cylinders, associated equipment, and the CGA publication P-1 listed in PRINCIPAL SAFETY STANDARDS. 7. Turn face away from valve outlet when opening cylinder valve. 8. Keep protective cap in place over valve except when gas cylinder is in use or connected for use. 9. Do not disassemble or repair the gas regulator except for the person authorized by the manufacturer of them. | |

| | |
|---|--|
|  | <p>Rotating parts may cause injuries. Be sure to observe the following.</p> |
| <p>If hands, fingers, hair or clothes are put near the fan's rotating parts or wire feeder's feed roll, injuries may occur.</p> <ol style="list-style-type: none"> 1. Do not use this equipment if the case and the cover are removed. 2. When the case is removed for maintenance/inspection and repair, certified or experienced operators must perform the work. Erect a fence, etc. around this equipment to keep others away from it. 3. Do not put hands, fingers, hair or clothes near the rotating fans or wire feed roll. | |

2. ARC WELDING SAFETY PRECAUTIONS (continued)

| | |
|--|---|
|  | <p>ARC WELDING work areas are potentially hazardous.</p> |
| <p>FALLING or MOVING machine can cause serious injury.</p> <ol style="list-style-type: none">1. When hanging the welding power source by a crane, do not use the carrying handle.2. Put the welding power source and wire feeder solidly on a flat surface.3. Do not pull the welding power source across a floor laid with cables and hoses.4. Do not put wire feeder on the welding power source.5. Do not put the welding power source and wire feeder where they will pit or fall. <p>WELDING WIRE can cause puncture wounds.</p> <ol style="list-style-type: none">1. Do not press gun trigger until instructed to do so.2. Do not point gun toward any part of the body, other people, or any metal when threading welding wire. | |

PRINCIPAL SAFETY STANDARDS

Arc welding equipment – Installation and use, Technical Specification IEC 62081, from International Electro technical Commission

Arc welding equipment Part 1: Welding power sources IEC 60974-1, from International Electro technical Commission

Safety in Welding and Cutting, ANSI Standard Z49.1, from American Welding Society.

Safety and Health Standards, OSHA 29 CFR 1910, from Superintendent of Documents, U.S. Government Printing Office.

Recommended Practices for Plasma Arc Cutting, American Welding Society Standard AWS C5.2, from American Welding Society.

Recommended Safe Practices for the Preparation for Welding and Cutting of Containers That Have Held Hazardous Substances, American Welding Society Standard AWS F4.1, from American Welding Society.

National Electrical Code, NFPA Standard 70, from National Fire Protection Association.

Safe Handling of Compressed Gases in Cylinders, CGA Pamphlet P-1, from Compressed Gas Association.

Code for Safety in Welding and Cutting, CSA Standard W117.2, from Canadian Standards Association, Standards Sales.

Safe Practices For Occupation And Educational Eye And Face Protection, ANSI Standard Z87.1, from American National Standards Institute.

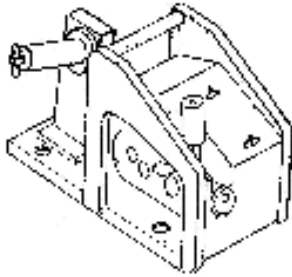
Cutting And Welding Processes, NFPA Standard 51B, from National Fire Protection Association.

NOTE: The codes listed above may be improved or eliminated. Always refer to the updated codes.

3. CHECK OF PACKAGE CONTENTS

- Check of quantity when opening the package.

□Wire feeder



• Standard Feed Roll and Standard Outlet Guide

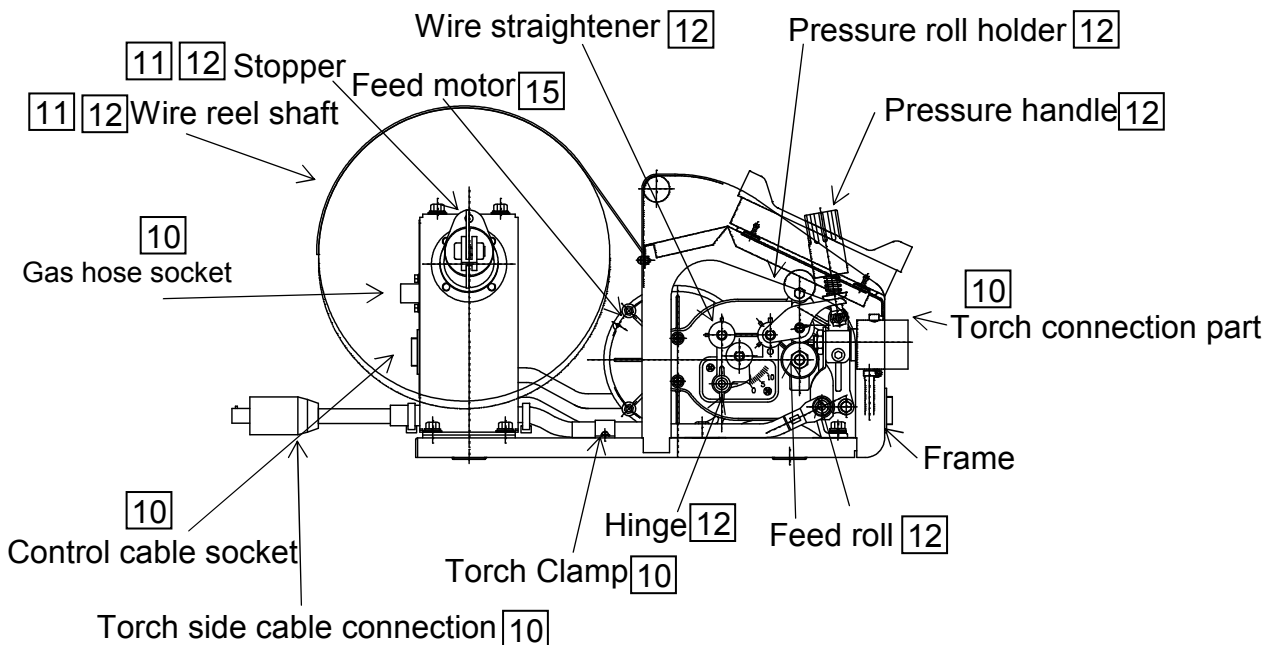
| No. | Description | Specification | | Q'ty |
|-----|--------------|--------------------------------|--------------------------------|------|
| | | U10050 (#4 Connection) | U10051 (#5 Connection) | |
| ① | Feed Roll | U1376H18 (.035 " ,.045 ") | U1369N03 (.052 " ,.045 ") | 1 |
| ② | Outlet Guide | K10024E04 (.035 " ,.045 ") | K10025E10 (.045 " ,1/16 ") | 1 |

• Standard accessories

| No. | Description | Specification | | Q'ty |
|-----|---------------|--------------------------------|---------------------------|------|
| | | U10050 (#4 Connection) | U10051 (#5 Connection) | |
| ① | Gas hose | U10050J00 | | 1 |
| ② | Control cable | U10050K00 | | 1 |
| ③ | Switch cord | U5971S00 | | 1 |
| ④ | Feed roll | U1376H16(.052 " ,1/16 ") | | 1 |
| ⑤ | Outlet Guide | K10024E10 (.045 " ,1/16 ") | — | 1 |
| ⑥ | Allen wrench | No.6 | | 1 |




4. EACH DESIGNATION

- is indicated to remarks pages.






5. TRANSPORTATION AND INSTALLATION

5.1 Transportation

|  WARNING | |
|---|--|
| Observe the following to prevent troubles in running and breakage of the welding machine. | |
|  | <ul style="list-style-type: none"> • When carrying or transferring the wire feeder, be sure to turn OFF input power supply by the line disconnect switch. |
|  | <ul style="list-style-type: none"> • When carrying the wire feeder to height, remove the wire from wire feeder. |

5.2 Installation

|  CAUTION | |
|---|---|
| In installing the welding machine, observe the following to prevent occurrence of fires by welding and physical damage by fume gas. | |
|  | <ul style="list-style-type: none"> • Do not install the welding machine near combustible materials and inflammable gas. • Remove combustible materials not to attach the spatter to them. If not removed, cover combustible materials with the noncombustible cover. |
|  | <ul style="list-style-type: none"> • For preventing gas-poisoning at choking, use local exhaust equipment or use protectors for respiration. • In welding at narrow space, ventilate the place sufficiently or wear the protectors for respiration, and work under supervision by a trained supervisor. |

INSTALLATION PLACE

- Observe the following when selecting a installation place.
 - Less humidity, dirt and dust. And do not expose welding machine to direct sun light, wind and rain.
 - Ambient temperature is $-10\sim 40^{\circ}\text{C}$.
 - There is no windows.
(Use a wind shield to protect arc from wind, otherwise blow hole may be caused.)

6. CONNECTION

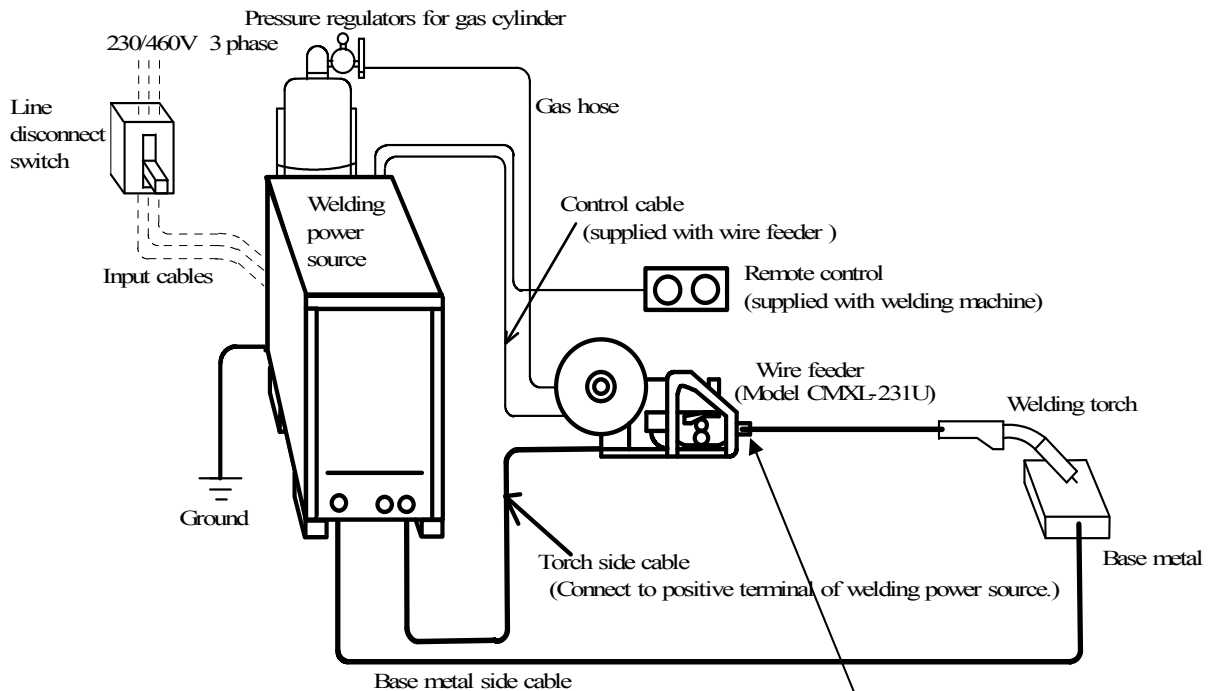
⚠ WARNING

- Be sure to turn OFF the line disconnect switch before connection.

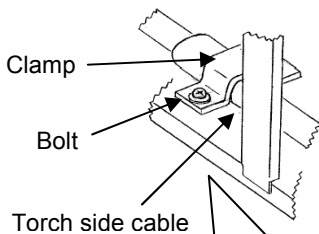
⚠ CAUTION

- Securely tighten connecting parts of cables.

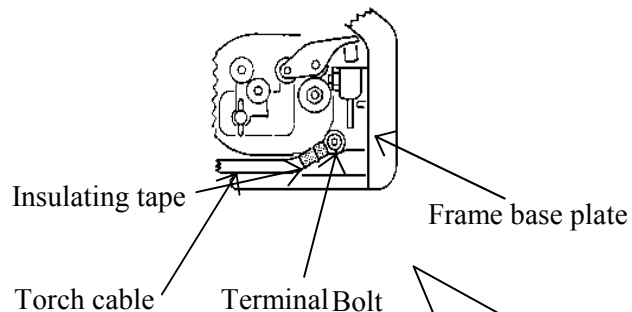
6.1 Connection of output side



Surely insert the power supply adapter and the gas connection plug of welding torch to wire feeder, check that the adapter nut is smoothly inserted, and tighten. (The threads may be damaged if it is inserted forcibly.)



Hold the torch side cable to Clamp and tighten bolt.




- Surely tighten the terminal of torch cable with bolt for preventing contact with frame base plate.
- The compound for better electrical connection is coated to attachment part. Never remove it.
- Insulate the terminal part with roll by the insulating tape.

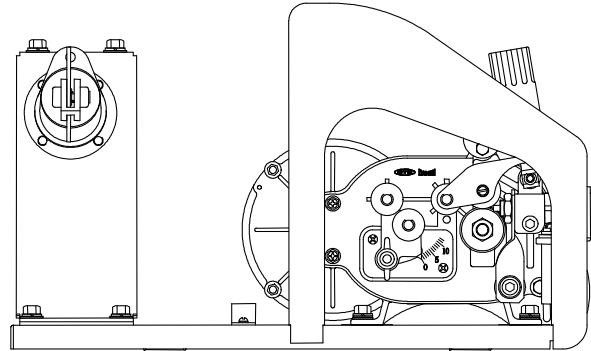
7. WELDING PREPARATION

7.1 Replace the wire reel shaft at lowering

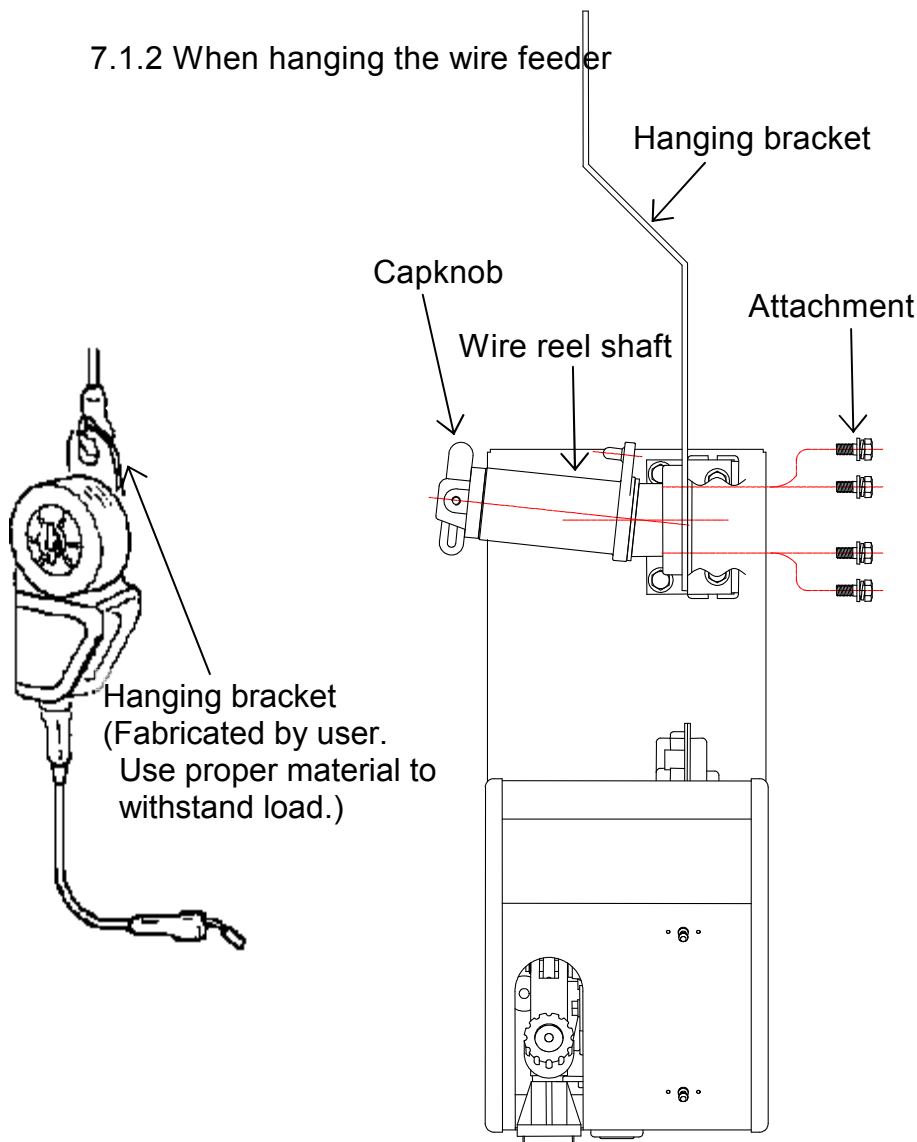
(When wire feeder is not lowering, this operation is not necessary)

| |
|---|
|  CAUTION |
| ● To prevent the wire dropping, be sure to observe the following at welding operation with hanging the wire feeder. |

7.1.1 Attachment condition at factory setting



7.1.2 When hanging the wire feeder



● when hanging the wire feeder, Capknob at top of the wire reel be upper than the end of wire reel.

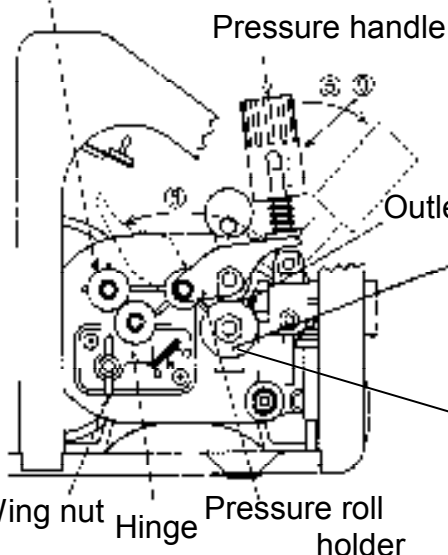
● when hanging the wire feeder wire reel shaft should be turned to 90° counterclockwise. commended tightening torque: 12.4N·m

● when performing welding with the wire feeder hung, firmly tighten the cap knob to prevent the wire reel from falling down.

7. WELDING PREPARATION (continued)

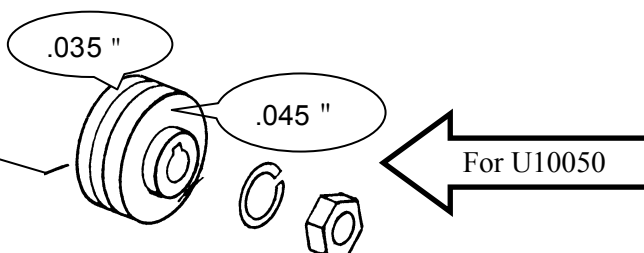
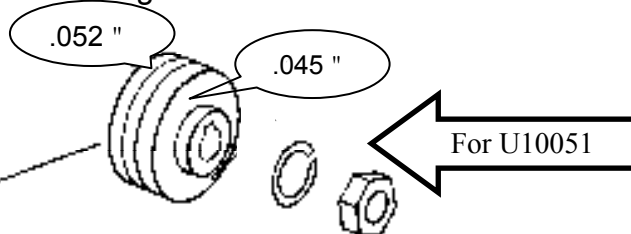
7.2 Fitting of wire

⑦ Wire straightener

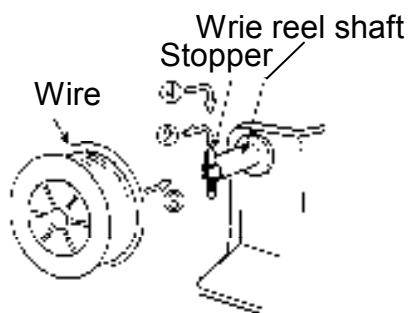


Checking wire size of the feed roll

- ① Check the groove of the feed roll and match with the welding wire size.



Attach the feed roll to the wire feeder, with proper groove facing out.



Fitting of wire

- ② Raise the stopper and bring it down.
- ③ Attach the wire to the wire reel shaft.
- ④ Return the stopper to original position.

⚠ CAUTION

• Be sure to return the stopper vertically as it was to prevent dropping of the wire.

- ⑤ Bring down the pressure handle.
- ⑥ Raise the pressure roll holder.
- ⑦ Pull out the wire to let it through the wire straightener, and insert it into the outlet guide.
- ⑧ Return the pressure roll holder and the pressure handle, in this holder.





Adjusting of pressure and straighter

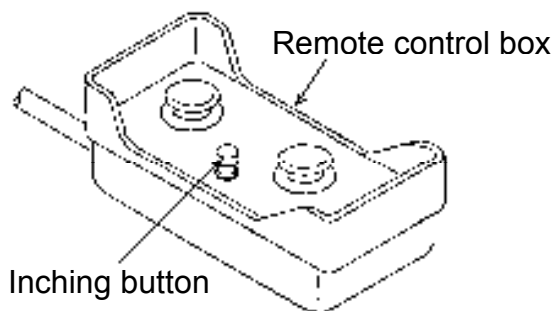
- ⑨ Adjust the pressure handle to set pressure force matching the wire size.
- ⑩ Loosen the wing nut, adjust the hinge and fix it at an appropriate position.

| Wire size | Wire pressure adjusting | | Wire straightener adjusting Straight hinge adjusting scale |
|-----------------|-------------------------|-----------------|---|
| | Pressure handle scale | | |
| | Solid wire | Flux cored wire | |
| 1/16 " | 5~6 | 4~5 | 0~2 |
| .045 " , .052 " | 5~6 | 3~4 | 1~3 |
| .040 " | 3~4 | — | 2~4 |
| .035 " | 2~3 | — | 3~5 |


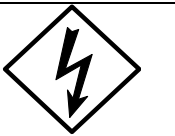

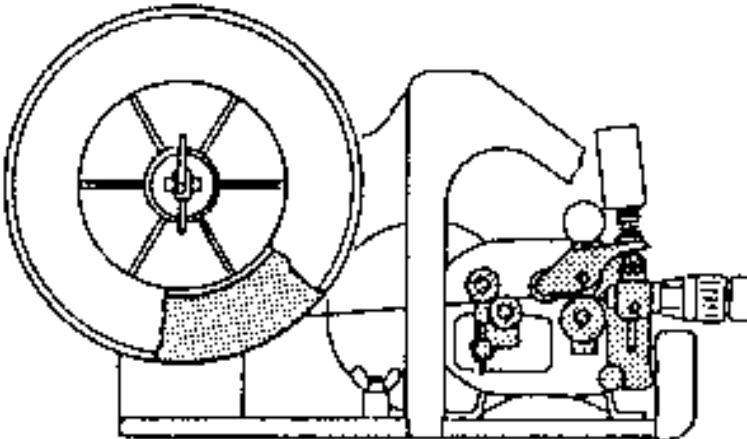
7. WELDING PREPARATION (continued)

7.3 Wire feeding by inching operation

| | |
|--|---|
|  WARNING | |
|  | <ul style="list-style-type: none">• Do not look into the tip hole to check on feeding of the wire while inching. |
|  CAUTION | |
|  | <ul style="list-style-type: none">• Do not put your hands, fingers, hair or clothes near the rotating parts of the feed roll, etc. while inching. Biting may occur, causing injuries. |



Feed the wire while stretching the welding torch straight and pressing the inching button, and release from the button when the wire is projected from the welding torch tip by about 10mm.

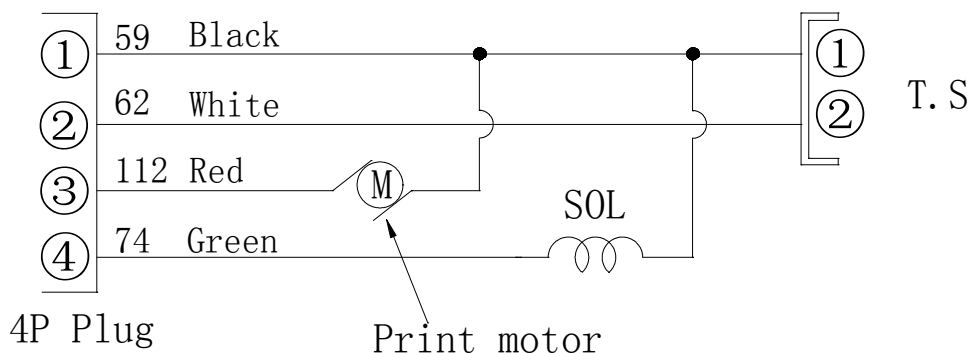
| | |
|--|--|
|  WARNING | |
| <input type="checkbox"/> Touching the electrification parts may cause fatal electric shock and burn. | |
|  | <ul style="list-style-type: none">• Never touch electrically hot parts of wire and wire feeder.  part is indicated to electrically hot part when welding. |
|  | |

8. MAINTENANCE AND REPAIR OF TROUBLES

8.1 Inspection in working

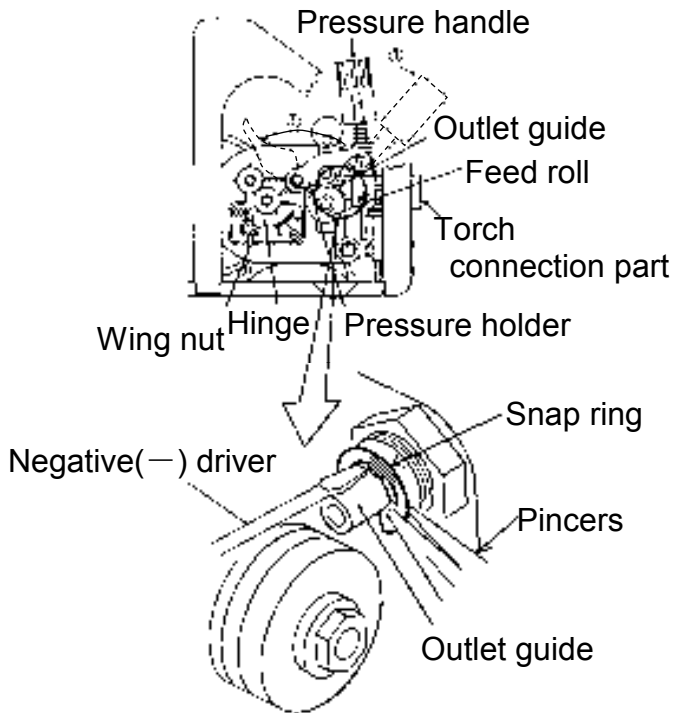
| Parts | Inspection point | Trouble | Measures |
|-----------------|---|--|--|
| Pressure scale | ●Is pressure force matching with the wire size? | Pressure force is too weak or too strong. | Match pressure force with the value of wire pressure adjustment recommended in item 7.2. |
| Outlet guide | ●Are not chips and dusts left around the inlet of the outlet guide and the feed roll? | Chips and dusts are left. | Remove chips and dusts. |
| Feed roll | ●Are the wire size and the marking of the feed roll matching? | Wire size and the marking do not match. | Change to the feed roll matching with the wire size. |
| | ●Wire touching surface condition. | The surface is worn. | Replace with a new one. |
| Pressure roll | ●Does the roll rotate smoothly? | The roll does not rotate smoothly. | Replace with a new one |
| Wire straighter | ●Are not chips and dusts left? | Chips and dusts are left. | Remove chips and dusts. |
| | ●Does the roll rotate smoothly? | The roll does not rotate smoothly. | Remove chips and dusts, or replace with a new one. |
| Cable | ●Is not the cable coating broken, or is not the cable liable to be disconnected? | The coating is broken or the cable is likely to be disconnected. | Replace with a new one. |
| | ●Is not the connecting part loosened? | The connecting part is loosened. | Firmly tighten. |
| Gas hose | ●Is not crazing formed? | Crazing is formed. | Replace with a new one. |

〈Schematic diagram〉



8. MAINTENANCE AND REPAIR OF TROUBLES (continued)

8.2 Replacement of outlet guide

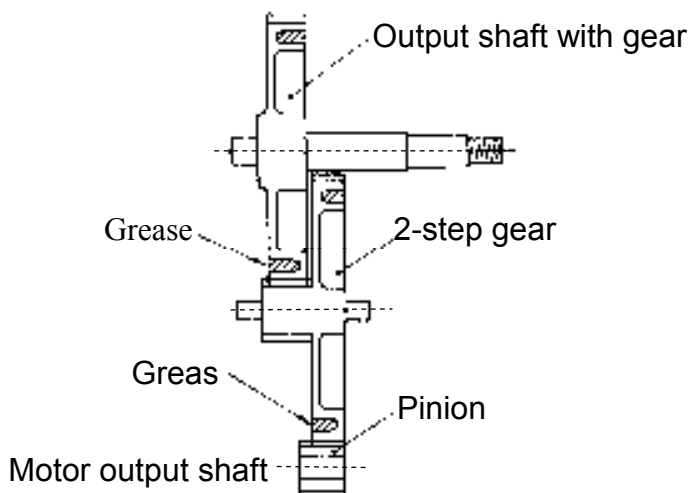


• In case of abrasion of the outlet guide, replace it as follows.

- ① Bring down pressure handle and pressure holder.
- ② Insert the negative (−) driver to gap of outlet guide with holding snap ring by pincers, and remove the snap ring.
- ③ Push out to outlet guide to torch connection part, and take it out.
- ④ Inset the new outlet guide from torch connection part, and insert snap ring.
- ⑤ Return the pressure roll holder and the pressure handle.

8.3 Yearly inspection

(1) Grease replacement of reduction gear



After removing aged grease, apply new to the gear tooth surface and side faces as shown in figure.

Use the grease No.1 of each lithium type.

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| ⚠ CAUTION |
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| <p>Apply grease on the side face of gear as shown in figure. Never fill the gear box with grease, otherwise motor will be burnt.</p> |
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(2) Replacement of feed motor

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| ⚠ CAUTION |
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| <ul style="list-style-type: none"> • Never disassemble the feed motor. Trouble may occur. • Never replace and check of brushing friction. |
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Usually service life of brush is about 3,000 hours (about two years, if used six hours a day).

Replace the feed motor periodically.

9. PARTS LIST

If parts are required for replacement, direct order involving Description and Part No. to our sales agent or OTC's office directly.

Refer to 9.3 about optional accessories.

9.1 Wire feeding reduction gear (Refer to Fig. 2)

| No. | CMXL-231U | | Description | Q'ty | Remarks |
|------|------------------------------|------------------------------|------------------------|-------|----------|
| | U10050(#4) | U10051(#5) | | | |
| 1 | K10001B01 | | Gear case | 1 | |
| 2 | GPM12-005183 | | Print motor | 1 | |
| 3 | | | Screw (small) | 4 | M5-20 |
| 4 | | | Spring washer | 4 | M5 |
| 5 | | | Washer | 4 | M5 |
| 6 | | | Nut | 2 | M5 |
| 7 | K5114B01 | | Pinion | 1 | |
| 8 | 3361-401 | | CS type snap ring | 1 | CSTW-10 |
| 9 | K1821B02 | | 2-step gear | 1 | |
| 10 | K5484B05 | | Bush | 2 | |
| 11 | K5484B04 | | Output shaft with gear | 1 | |
| 12 | K10001B06A | | Insulating spacer | 1 | |
| 13 | | | Radial ball bearing | 1 | 6000-ZZ |
| 14 | 3361-206 | | Key | 1 | 4×4×8 |
| 15 | | | Radial ball bearing | 1 | 6001-2RZ |
| 16 | K5512G00 | | Torch clamp | 1 set | |
| 16-1 | K5512G01 | | Torch clamp | 1 set | |
| 16-2 | | | Bolt with hexagon hole | (2) | M8-20 |
| 16-3 | | | Spring washer | (1) | M8 |
| 16-4 | | | Washer | (1) | M8 |
| 16-5 | K5512C01 | | Gear case | 1 | |
| 16-6 | K5512C05 | | Insulating washer | 1 | |
| 16-7 | | | Hexagon bolt | 1 | M6-35 |
| 16-8 | | | Hexagon bolt | 1 | M6-40 |
| 16-9 | K5512G03 | | conductor | 1 | |
| 17 | K5484B07 | | Spacer | 1 | |
| 18 | U1376H18 (.035 " ,045 ") | U1369N03 (.052 " ,045 ") | Feed roll | 1 | |
| 19 | | | Washer | 3 | M10 |
| 20 | | | Spring washer | 1 | M10 |
| 21 | | | Nut | 1 | M10 |
| 22 | K5512C02 | | Bolt fixing plate | 1 | |
| 23 | | | Screw (small) | 2 | M5-20 |
| 24 | | | Spring washer | 2 | M5 |
| 25 | K5578C00 | | Hinge assembly | 1 set | |
| 26 | K5578B00 | | Pressure roll assembly | 1 set | Assembly |
| 27 | K5578B01 | | Pressure roll holder | 1 | |
| 28 | K5578B02 | | Pressure roll shaft | 1 | |

9. PARTS LIST(continued)

| No. | CMXL-231U | | Description | Q'ty | Remarks |
|------|--------------------------------|--------------------------------|--------------------------|-------|----------------|
| | U10050(#4) | U10051(#5) | | | |
| 29 | | | Radial ball bearing | 1 | 6200-2RZ |
| 30 | K5512C03 | | Straight roll (1) | 1 | with bush |
| 31 | K5512C04 | | Straight roll (2) | 2 | with bush |
| 32 | 3361-402 | | Thrust washer | 4 | STW-FT-8.0×0.5 |
| 33 | 3361-403 | | E-type snap ring | 4 | E-6 |
| 34 | 3361-503 | | Cup square neck bolt | 1 | B type M8-40 |
| 35 | 3361-505 | | Wing nut | 1 | M8 |
| 36 | 3361-208 | | Spring roll pin | 1 | φ 3-20 |
| 37 | K10024E00 | K10025E00 | Central adapter | 1 set | |
| 37-1 | K10024E01 | K10025E01 | Power metal fitting | 1 | |
| 37-2 | 501.0588 | | Block | 1 | |
| 37-3 | K10024E04 (.035 " ,.045 ") | K10025E10 (.045 " ,1/16 ") | Outlet guide | 1 | |
| 37-4 | E-4 | | E type snap ring | 1 | |
| 37-5 | K10024E05 | | Nut | 1 | |
| 37-6 | MH-4 | | Sleeve | 2 | |
| 37-7 | W-35253 | | Gas hose | 0.16M | |
| 37-8 | K10024E02 | | Hose nipple | 1 | |
| 38 | K5512D00 | | Pressure handle assembly | 1 set | |
| 39 | | | Hexagon bolt | 2 | M6-25 |
| 40 | | | Spring washer | 3 | M6 |
| 41 | | | Nut | 1 | M6 |
| 41-1 | | | Loose fixing nut | 1 | M6 |

9.2 Others (Refer to Fig. 1)

| No. | CMXL-231U | | Description | Q'ty | Remarks |
|------|------------|------------|------------------------|------|---------|
| | U10050(#4) | U10051(#5) | | | |
| 43 | U10001B00 | | Frame body | 1 | |
| 44 | W-W05047 | | Gas solenoid valve | 1 | |
| 45 | W-W05070 | | Spindle type wire reel | 1 | |
| 46 | U5185J01 | | Wire reel cover | 1 | |
| 47 | U5295C01 | | Hose clamp | 1 | |
| 48 | U10050D00 | | Gas hose assembly | 1 | |
| 49 | U10050E00 | | Control cable assembly | 1 | |
| 49-1 | KDP-95C | | Quick disconnect | 1 | |

9. PARTS LIST(continued)

9.3 Optional accessories

(1) Extension cables and hoses

• Control cables (4P)

| Cable length | 5 m | 10 m | 15 m | 20 m |
|--------------|--------------|--------------|--------------|--------------|
| Model | BKCPJ - 0405 | BKCPJ - 0410 | BKCPJ - 0415 | BKCPJ - 0420 |

• Remote control (6P)

| Cable length | 5 m | 10 m | 15 m | 20 m |
|--------------|--------------|--------------|--------------|--------------|
| Model | BKCPJ - 0605 | BKCPJ - 0610 | BKCPJ - 0615 | BKCPJ - 0620 |

(2) Others

| CMXL-231U | | Description | Q'ty | Remarks |
|------------|---------------------------------|---|-------|------------------------|
| U10050(#4) | U10051(#5) | | | |
| | U1369N01 | Feed roll (For ϕ .045 " , 1/16 ") | 1 | |
| | U1369N03 | Feed roll (For ϕ .045 " , .052 ") | 1 | |
| | U1376H13 | Feed roll (For ϕ .052 " , .052 ") | 1 | |
| | U1376H16 | Feed roll (For ϕ .052 " , 1/16 ") | 1 | |
| | U1376H02 | Feed roll (For ϕ .035 " , .040 ") | 1 | |
| | U1376H03 | Feed roll (For ϕ .045 " , .045 ") | | |
| | K970E24 | Feed roll (For ϕ .045 " , .045 ") | 1 | Ceramic type |
| | K970E25 | Feed roll (For ϕ .052 " , .052 ") | 1 | Ceramic type |
| | U1997G00 | Caster | 1 set | For wire feeder moving |
| | K536A00 | Spindle type wire reel (Insulating type, with brake) | 1 | |
| K10025E00 | — | Central Adapter for #5 Connection | 1 | |
| — | K10024E00 | Central Adapter for #4 Connection | 1 | |
| — | K10024E04 (.035 " , .045 ") | Outlet Guide | 1 | |

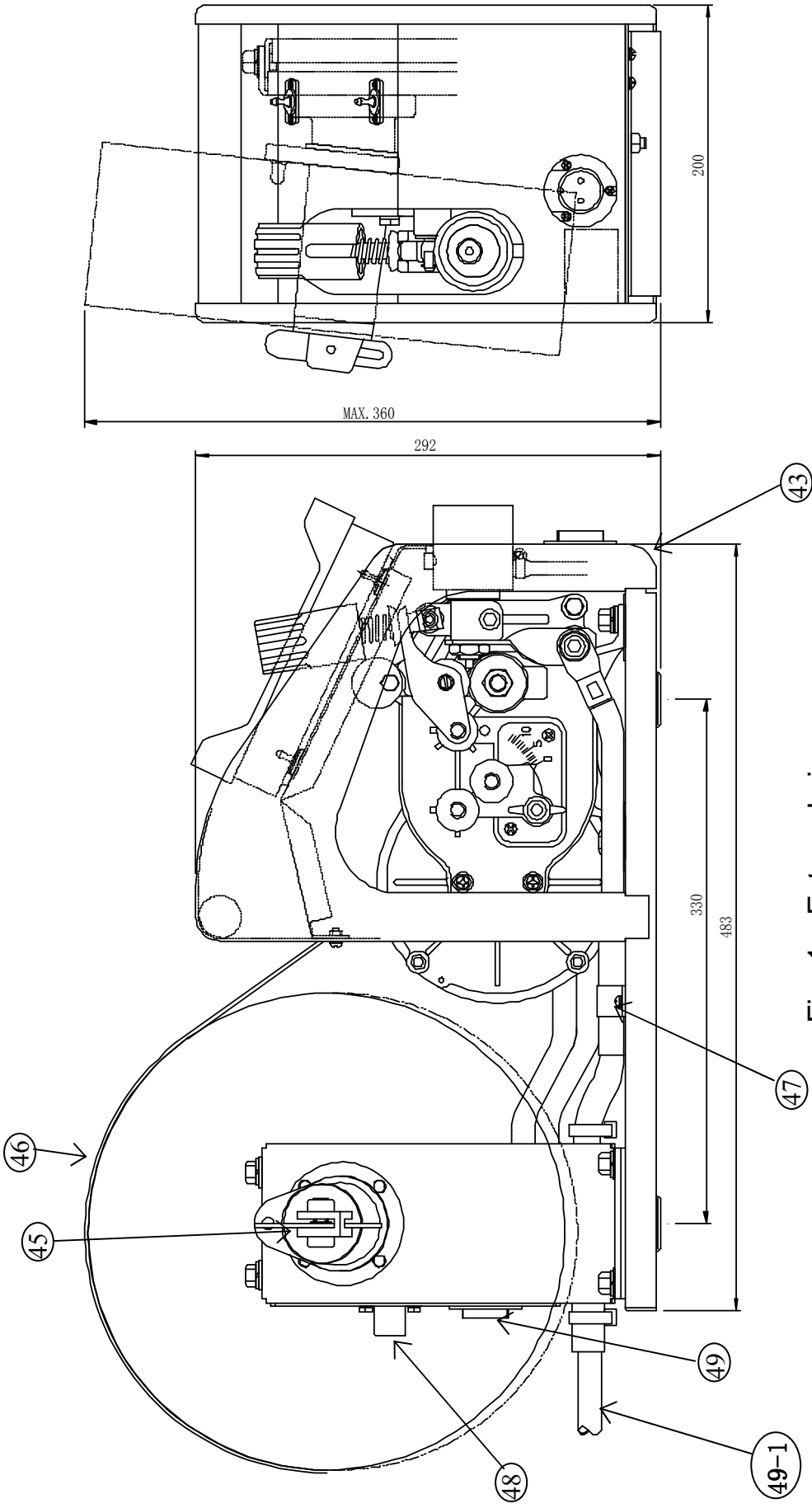


Fig. 1 External view

10. SPECIFICATIONS

10.1 Specifications

| | | |
|--------------------------|--|--------------|
| Model | CMXL-231U | |
| Feeder Type | U10050 | U10051 |
| Connection Type | TWECO #4 | TWECO #5 |
| Applicable wire diameter | (.031 "), .035 " , .039 " , (.031 "), (.035 "), (.039 "), .045 " , (.052 "), (.1/16 ") .045 " , .052 " , (.1/16 ") | |
| Applicable wire | Solid wire, flux cored wire | |
| Wire feeding speed | Max. 18m / min. | |
| Applicable wire reel | Shaft dia. | φ 50mm |
| | Outer dia. | Max. φ 300mm |
| | Width | 103mm |
| Applicable wire mass | Max. 25kg | |
| Approximate mass | 14 kg | |

10.2 Standard accessories

| No. | Description | Specification | | Q'ty |
|-----|---------------|--------------------------------|------------|------|
| | | U10050(#4) | U10051(#5) | |
| ① | Gas hose | U10050J00 | | 1 |
| ② | Control cable | U10050K00 | | 1 |
| ③ | Switch cord | U5971S00 | | 1 |
| ④ | Feed roll | U1376H16(.052 " ,1/16 ") | | 1 |
| ⑤ | Outlet Guide | K10024E10 (.045 " ,1/16 ") | - | 1 |
| ⑥ | Allen wrench | No.6 | | 1 |



DAIHEN Corporation
4-1, Koyochonishi, Higashinada-ku,
Kobe, Hyogo, Japan 658-0033
Phone: +81-78-275-2006, Fax: +81-78-845-8159

DAIHEN, INC.
DAYTON OFFICE
1400 Blausen Drive
Tipp City, Ohio 45371, USA
Phone: +1-937-667-0800, Fax: +1-937-667-0885

OTC DAIHEN EUROPE GmbH.
Krefelder Str. 677, D-41066 Mönchengladbach, F.R. GERMANY
Phone: +49-2161-69-49710, Fax: +49-2161-69-49711

OTC Industrial (Shanghai) Co.,Ltd.
7G Majesty Building, 138 Pu Dong Da Dao Shanghai
The People's Republic of China
Post Code: 200120
Phone: +86-21-58828633, Fax: +86-21-58828846

OTC (Taiwan) Co.,Ltd.
No. 63-4, Nan Yuan 2 Rd., Chung Li,
Taoyuan Hsien, Taiwan R.O.C.
Phone: +886-3-461-3962, Fax: +886-3-434-2394

OTC DAIHEN Asia Co.,Ltd.
60 / 86 Moo 19, Navanakorn Industrial Estate Phase 3
Klong Nueng, Klong Luang, Pathumthani 12120
Phone: +66-2-909-4163, Fax: +66-2-909-4166

Upon contact, advise MODEL and MANUAL NO.