MANUAL NO:U5279

OWNER'S MANUAL

FOR

WIRE FEEDER

MODEL: CM-7401 U5279

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

November 20, 2003

Upon contact, advise MODEL and MANUAL NO.

TABLE OF CONTENTS

1. SAFETY INFORMATION

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

⚠ **WARNING**	**WARNING gives information regarding possible personal injury or loss of life.**

⚠ **CAUTION**	**CAUTION refers to minor personal injury or possible equipment damage.**

2. ARC WELDING SAFETY PRECAUTIONS

⚠ **WARNING**
ARC WELDING can be hazardous.
◆ **PROTECT YOURSELF AND OTHERS FROM POSSIBLE SERIOUS INJURY OR DEATH. Be sure to:** **・Keep children away.** **・Keep pacemaker wearers away until consulting a doctor.**
◆ **Read and understand the summarized safety information given below and the original principal information that will be found in the PRINCIPAL SAFETY STANDARDS.**
◆ **Have only trained and experienced persons perform installation, operation, and maintenance of this equipment.**
◆ **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.

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.

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 turn off 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.**

WELDING can cause fire and explosion.

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.

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 33ft. (10m) 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. **Do 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. **Never wear contact lenses while welding and in the welding areas.**

2. ARC WELDING SAFETY PRECAUTIONS (continued)

Rotating parts may cause injuries. Be sure to observe the following.

If hands, fingers, hair or clothes are put near the fan's rotating parts or wire feeder's feed roll, injuries may occur.

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.**

ARC WELDING work areas are potentially hazardous.

FALLING or MOVING machine can cause serious injury.

- **Use both eyebolts, if installed, to lift the welding power source.**
- **Put the welding power source and wire feeder solidly on a flat surface.**
- **Do not pull the welding power source across a floor laid with cables and hoses.**
- **Do not put wire feeder on the welding power source.**
- **Do not put the welding power source and wire feeder where they will pit or fall.**

WELDING WIRE can cause puncture wounds.

- **Do not press gun trigger until instructed to do so.**
- **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 Electrotechnical 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.

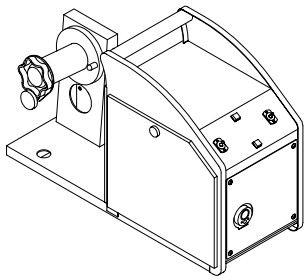
Safe Practices For Occupation And Educational Eye And Face Protection, ANSI Standard Z87.1, from American National Standards Institute.

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

3. CHECKING OF QUANTITY OF THE ACCESSORIES

Make sure that you have the items below before you use the wire feeder.

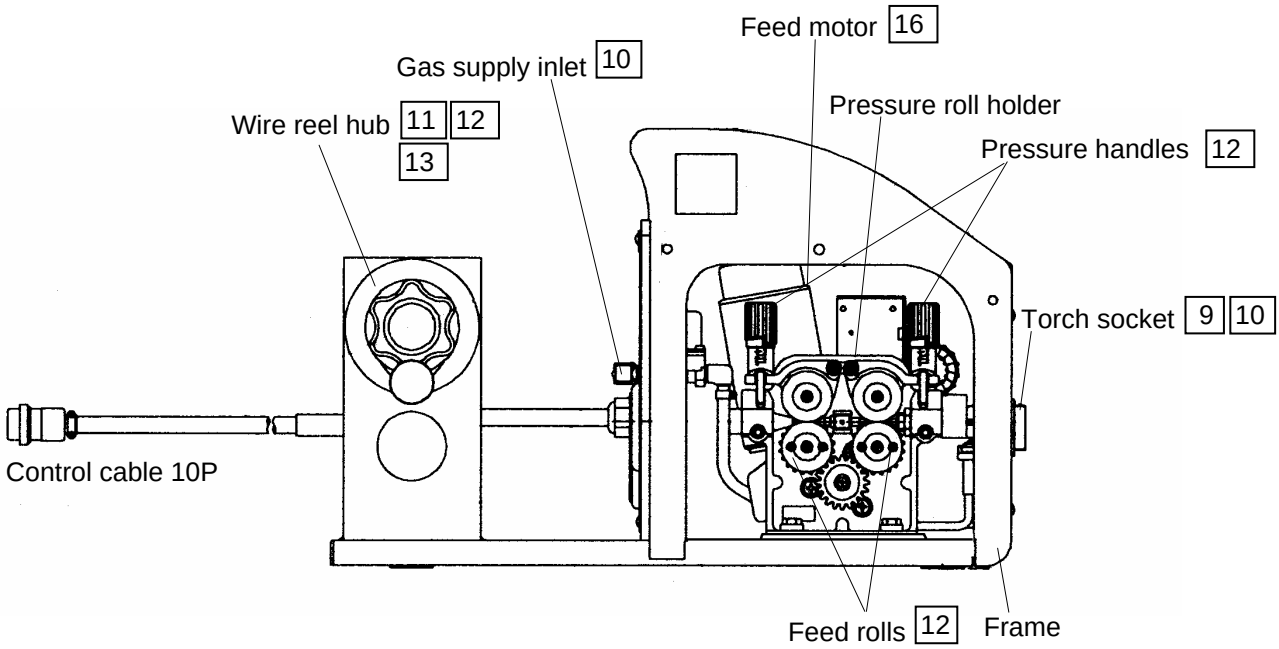
Wire feeder

Wire feeder	Accessory
	

No.	Description	Specification	Quantity
①	Gas hose (3m)	K5430A00	1
②	Hose cover	U1997C03	1

4. NAMES OF PARTS

Refer to the page indicated in ☐ for details.

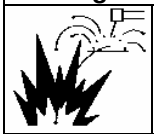
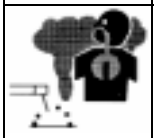


5. CARRYING AND INSTALLING OF THE WIRE FEEDER

5.1 Transportation

⚠ WARNING	
Observe the following to avoid damage to the wire feeder or physical injury when carrying the equipment.	
	● **Do not touch the charging parts inside or outside the wire feeder.** ● **Disconnect the wire feeder from the welding power source by turning off the line disconnect switch in the power box to avoid an electric shock before carrying the equipment.**
	● **Be sure to detach the wire reel from the fire feeder before lifting the equipment to the high places by a crane.**

5.2 Installation

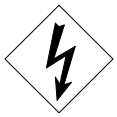
⚠ WARNING	
When installing the wire feeder, follow the instructions below to avoid occurrence of fires during welding and physical damage by fume gas.	
	● **Do not place the welding machine near combustible materials and flammable gas.** ● **Remove combustible materials to prevent dross coming into contact with combustible objects. If that not possible, cover them with noncombustible covers.**
	● **To avoid gas poisoning and danger of suffocation, wear a gas mask or adequately ventilate when using the welding machine in the place regulated by a local law.** ● **To prevent disorder or poisoning caused by fume, wear a gas mask or weld at a partial exhaust facility approved by the local regulation.** ● **Adequately ventilate or wear a gas mask when using the welding machine in a tank, a boiler, a hold of a ship, because heavier gas such as carbon dioxide or argon gases are drifting there.** ● **When using the welding machine at a narrow space, comply with a trained supervisor's directions. And be sure to wear a gas mask.** ● **Do not operate the welding machine near the place where degreasing, cleansing, and spraying are performed. Otherwise, poisonous gas may be generated.** ● **Be sure to wear a gas mask or adequately ventilate when welding a coating steel plate. (Poisonous gas and fume may be generated.)** ● **Do not place the welding power source, wire feeder, torch, and control cable (including the extension cable) in an area where the equipment can become wet.**

INSTALLATION PLACE

Follow the instructions below when selecting an installation place of the wire feeder.

- **Do not install the wire feeder in the indoor place subject to direct sunlight and rain.**
- **Install the wire feeder in the place where the ambient temperature is between -10 ˚C and +40 ˚C.**
- **Do not place the welding power source, wire feeder, torch, and control cable (including the extension cable) in an area where the equipment can become wet.**
- **Use a wind shield to protect arc from a wind blow when welding on a windy day.**

6. CONNECTION PROCEDURE

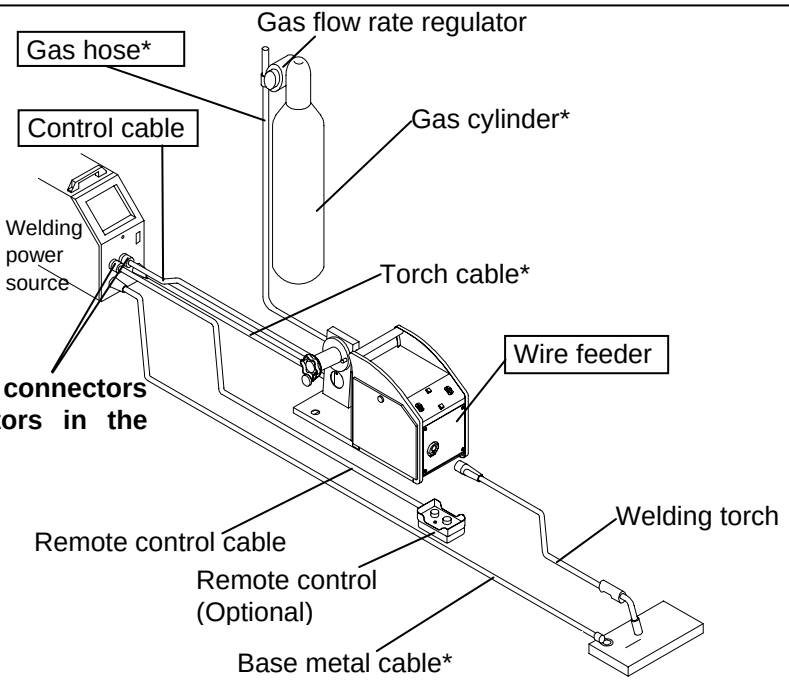
⚠ CAUTION	
	**Follow the instructions below to avoid electric shock.**

*** Do not touch the charging parts, as this will result in fatal shock and severe burns.**

- **Do not touch the charging parts of the welding machine.**
- **Have a qualified electric engineer ground the case of the welding power source and the base metal or jig electrically connected, following a local low.**
- **Disconnect the wire feeder from the welding power source by turning off the line disconnect switch in the power box to avoid an electric shock before grounding the welding power source or base metal and connecting the cables or hoses.**
- **Do not use a cable with lack of capacity or a cable seriously damaged.**
- **Tighten and insulate the connections of cables.**
- **Firmly attach the cover of the welding machine after connection of the cables.**
- **Do not place the welding power source, wire feeder, torch, and control cable (including the extension cable) in an area where the equipment can become wet.**

6.1 Connecting to the Welding Power Source and to the Gas Flow Rate Regulator

Standard Composition



Firmly attach the DINSE connectors by turning the connectors in the clockwise direction.

NOTE: Standard composition consists of the parts indicated in □. Preparation of the parts except the standard composition is required to use the wire feeder.
***Available in 5 m, 10 m, 15 m, and 20 m.**

Follow the steps below to connect to the welding power source and to the gas flow rate regulator.

1. Ground the base metal (if required by local laws or codes).
2. Connect between the negative output terminal for the base metal and the base metal with the base metal cable.
3. Attach the torch cable to the positive output terminal for the torch.
4. After removing the right-side plate of the wire feeder, attach the torch cable to the M10 terminal.
5. Plug the control cable for the wire feeder (10P) into the wire feeder socket on the welding power source.
6. Attach the gas hose to the gas supply inlet on the wire feeder.
7. Connect the welding torch to the wire feeder.

6. CONNECTION PROCEDURE (continued)

6.2 Connecting of the Torch Cable

⚠ WARNING

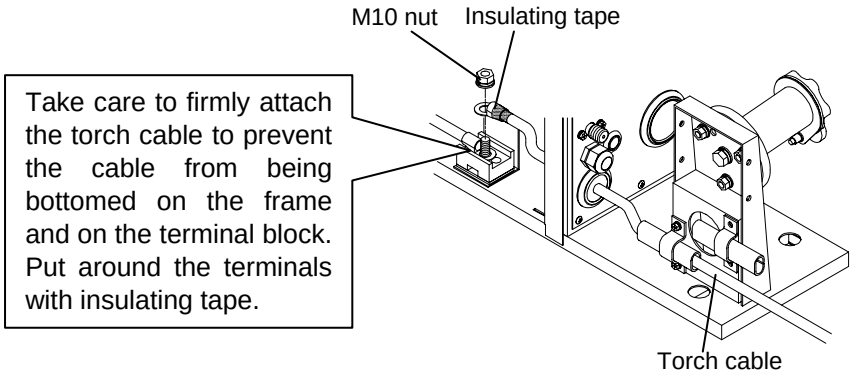
*** Touching the charging parts may result in fatal electric shock and severe burns.**
- **Do not touch the charging parts of the welding machine.**
- **Have a qualified electric engineer ground the case of the welding power source and the base metal or jig electrically connected in accordance with a local low.**
- **Disconnect the wire feeder from the welding power source by turning off the line disconnect switch in the power box to avoid an electric shock before the welding power source or base metal and connecting the cables or hoses.**
- **After connecting the cables, cover the power source with the cover or case.**
- **When using the welding machine in such a humid environment as construction site, on the steel plate, or on steel structure, install a leakage breaker.**

⚠ CAUTION

- **Use the proper torch cable that matches the welding current.**

Applicable current (Rated current)	Cable thickness
200 A	38mm^2 or more
350 A*	60mm^2 or more
500 A	80mm^2 or more

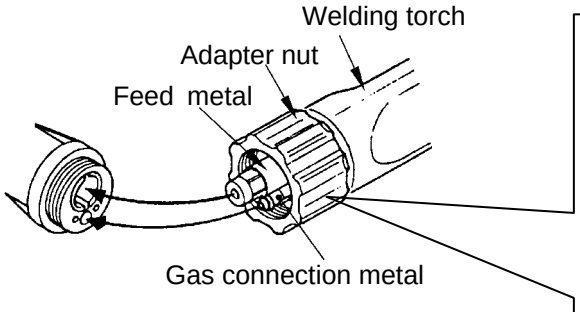
*** When performing pulse welding using the welding power source with 350 A applicable current and a 17m or more cable, use the thicker cable by one rank.**



6.3 Connecting of the Welding Torch

⚠ CAUTION

- **Ensue that the torch connector is firmly attached. If the connector is not fully inserted, there may be a risk of fire, burns, and product damage.**



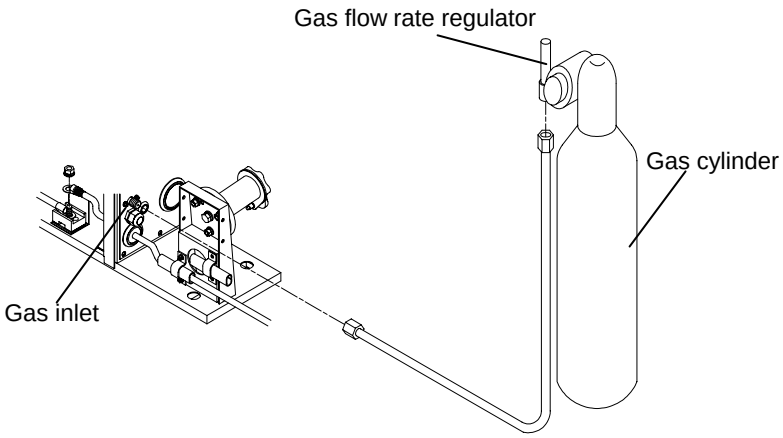
Before connecting a wire feeder to a welding torch, make sure that the feed metal and gas connection metal are inserted into the welding torch until restricted **and that the adapter nut is properly inserted into the welding torch**. (Forcible insertion of the adapter nut may result in damage to the threads of the metals.)

6. CONNECTION PROCEDURE (continued)

6.4 Connecting of the Gas Hose

⚠ WARNING	
	● **You may suffer from danger of suffocation caused by lack of oxygen when shield gas keeps drifting in a closed place. Be sure to turn off the shield gas at the main when the welding power source is not in use.**

⚠ WARNING
● **Be sure to connect the gas hose after fixing to the stand, as physical injuries may result from falling down of gas cylinder.**
● **Attach a proper gas flow rate regulator to the gas cylinder. Failure to observe the demand may result in physical injuries. The gas flow rate regulator for high pressure gas must be used.**



How to Make Gas Connection

1. Firmly connect the gas hose to the gas supply inlet located on the rear side of the wire feeder.
2. Mount the gas flow rate regulator on the gas cylinder by tightening the nut for attaching the gas cylinder .
3. Connect the gas hose to the gas supply outlet on the gas flow rate regulator.

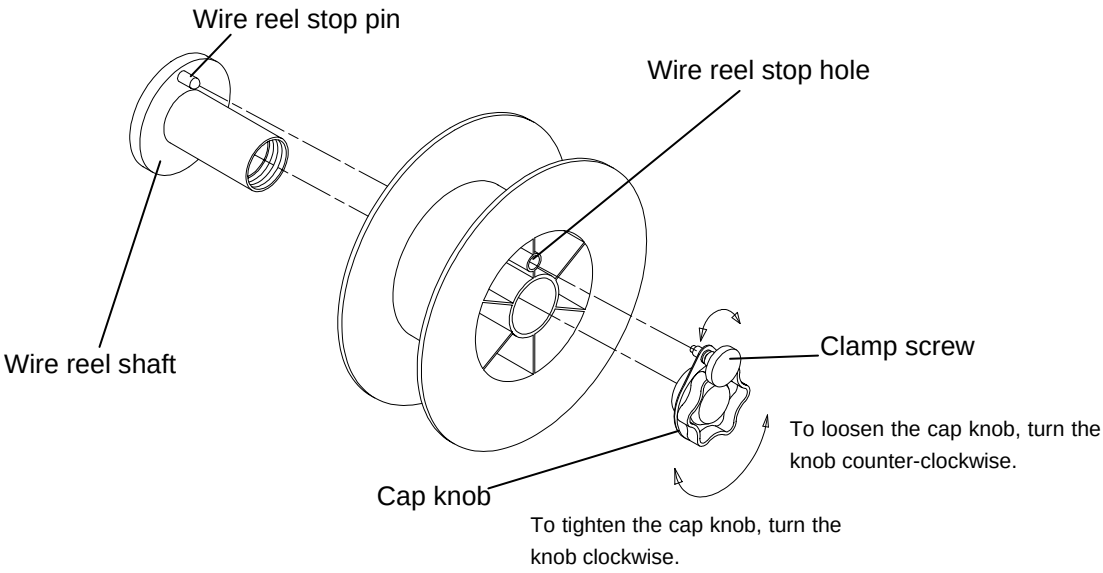
NOTE: Firmly tighten the nuts using a monkey wrench, etc. to connect the gas hose and gas flow rate regulator.

7. WELDING PREPERATION

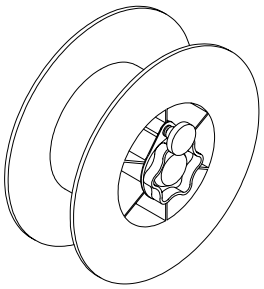
7.1 Fitting of Wire

1. Loosen the screw to clamp the cap knob.
2. Detach the cap knob from the wire reel shaft.
3. Mount the wire reel on the wire reel shaft.

NOTE: Check the positions of the wire reel stop pin and the wire reel stop hole to insert and fully seat the pin into the hole.



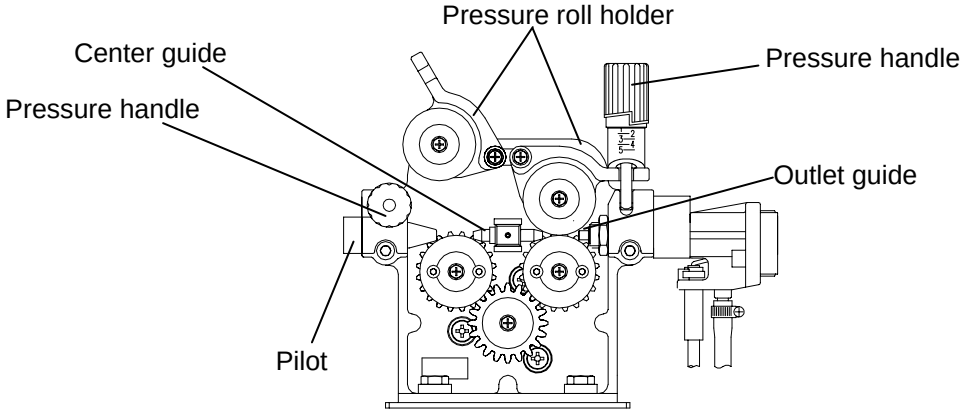
4. Firmly tighten the cap knob.
5. Align the hole in the cap knob with the wire reel stop hole, then cap the wire reel hole with the clamp screw to prevent the cap knob from dropping.



⚠ CAUTION

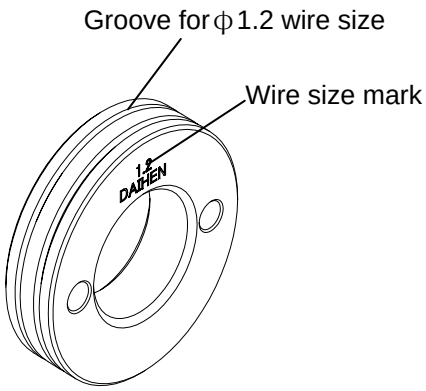
- **When hanging the wire feeder, firmly fix the cap knob and clamp screw in position to prevent the device from dropping.**

6. Bring down the pressure handle, then raise the pressure roll holder.
7. After pulling out the wire, thread it from the pilot to outlet guide through the center guide.
8. Return the pressure reel holder first, the pressure handle.



7. WELDING PREPERATION (continued)

7.2 Mounting of the Feed Roll

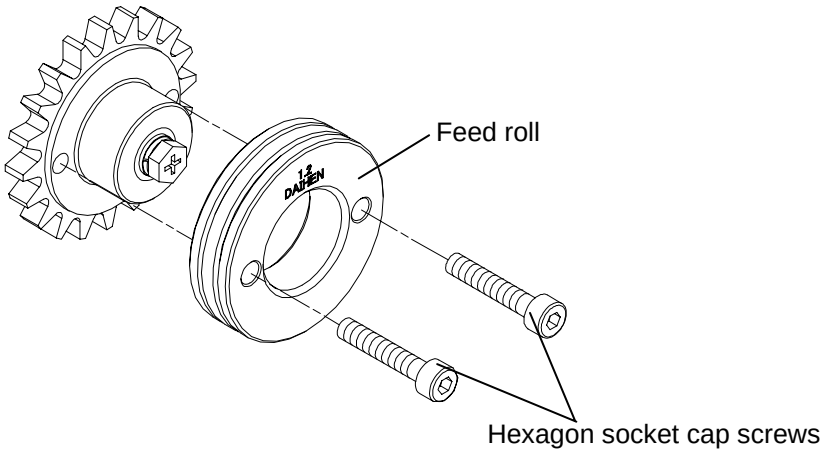


Confirming of the wire size marked on the feed roll

Use the proper feed roll for the wire size.
The feed roll of ϕ1.2 wire size is mounted on the CM-701 wire feeder.

Replacing of the feed roll

1. Remove the hexagon socket cap screws fixing the feed roll.
2. Bring down the pressure handle, and then lift the pressure roll holder.
3. Separate the feed roll from the wire feeder by pulling out the feed roll toward you.
4. Mount the feed roll, with the wire size marked on the wire feeder facing out.



Adjusting of the wire pressure and straightener

- Set to the proper wire pressure for the wire type by turning the pressure handle.
- The numeral on the pressure scale set with the right pressure handle should be correspond to the one set with the left pressure handle.

Recommended wire pressure adjustment

Wire diameter	Wire pressure scale	
	Solid wire	Flux cored wire
ϕ1.6, ϕ2.0	4 - 5	3 - 4
ϕ1.2, ϕ1.4	3 - 4	2 - 3
ϕ0.9, ϕ1.0	2 - 3	
ϕ0.8	1 - 2	

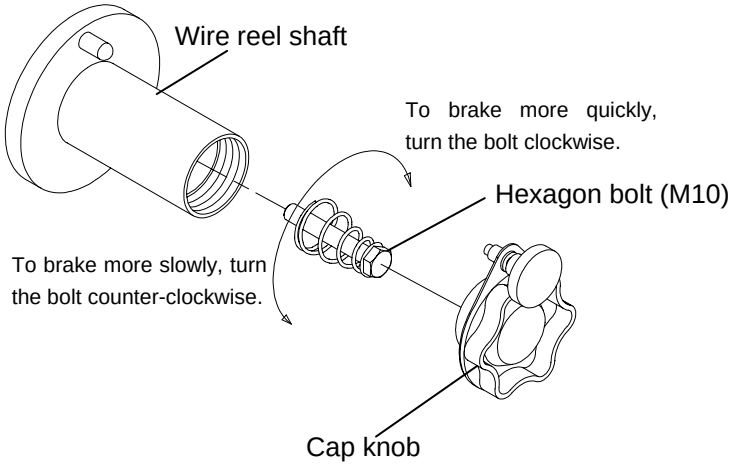
7. WELDING PREPERATION (continued)

7.3 Adjusting of the wire reel hub

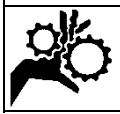
After performing inching operation, take care to adjust the brake of the wire reel hub to prevent the wire from going too slack. The bake has been properly adjusted before shipment. Therefore, readjustment of the brake is not required for welding in standard welding conditions.

How to adjust the wire reel hub

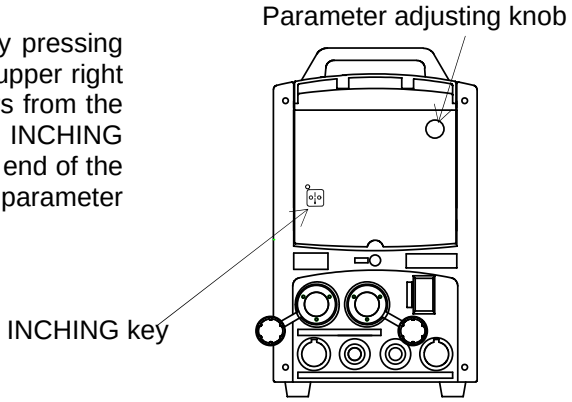
1. Detach the cap knob from the wire reel shaft.
2. Adjustment of the brake can be achieved by turning the hexagon bolt (M10).



7.4 Feeding Wire Feeding by Performing Inching Operation

⚠ **WARNING**	
	● **Do not look into the tip hole to check for the rate of wire feeding while inching.**
⚠ **CAUTION**	
	● **Keep away your hands, fingers, hair or clothes from the rotating parts of the feed roll, etc. to prevent you from being caught into the rotating parts while inching.**

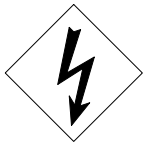
After straightening the welding torch, feed the wire by pressing the INCHING key. (the INCHING lamp located at the upper right of the INCHING key lights up). When the wire appears from the end of the torch, press the INCHING key again (the INCHING lamp goes out). Cut the wire at about 10 mm from the end of the torch. Wire feed rate can be adjusted by turning the parameter adjusting knob.



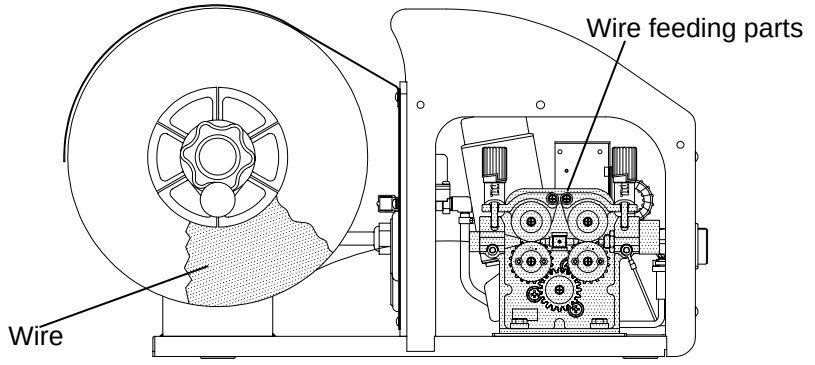
7. WELDING PREPERATION (continued)

⚠ WARNING

Touching the charging parts may cause fatal electric shocks and burns.



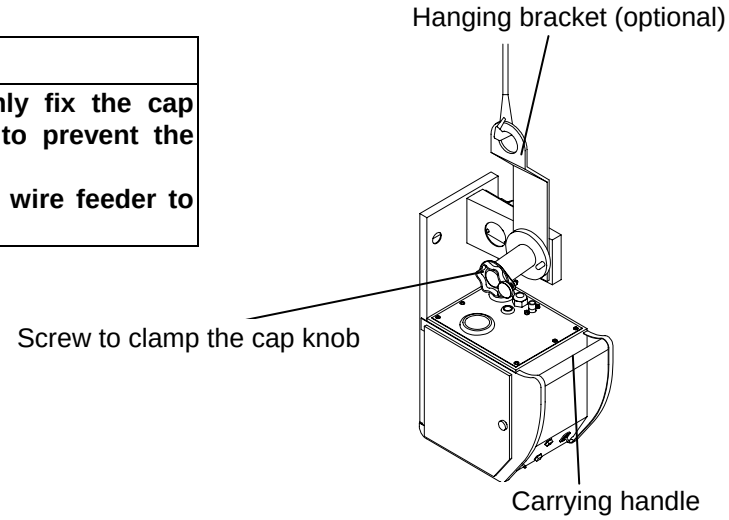
- **Never touch the charging parts in the wire and wire feeder.**
  The parts indicated as ▨ in the figure are the charging parts during welding.



7.5 Hanging the Wire Feeder

⚠ CAUTION

- **When hanging the wire feeder, firmly fix the cap knob and clamp screw in position to prevent the device from dropping.**
- **Do not use the carrying hand of the wire feeder to hang the wire feeder.**



8. MAINTENANCE AND TROUBLESHOOTING

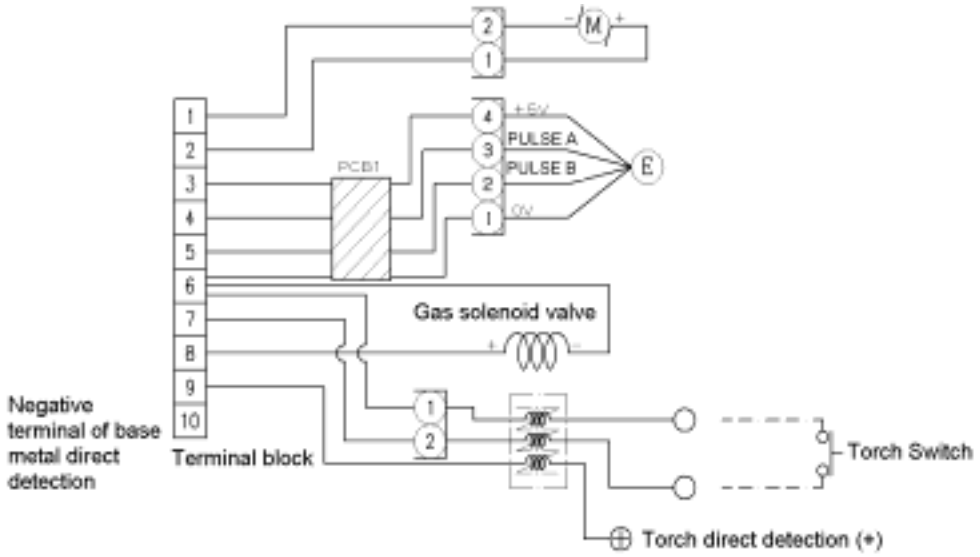
8.1 Carrying Out Maintenance

⚠ WARNING	
	● **Do not touch the charging parts inside or outside the wire feeder.** ● **Disconnect the wire feeder from the welding power source by turning off the line disconnect switch in the power box to avoid an electric shock before carrying the equipment.**

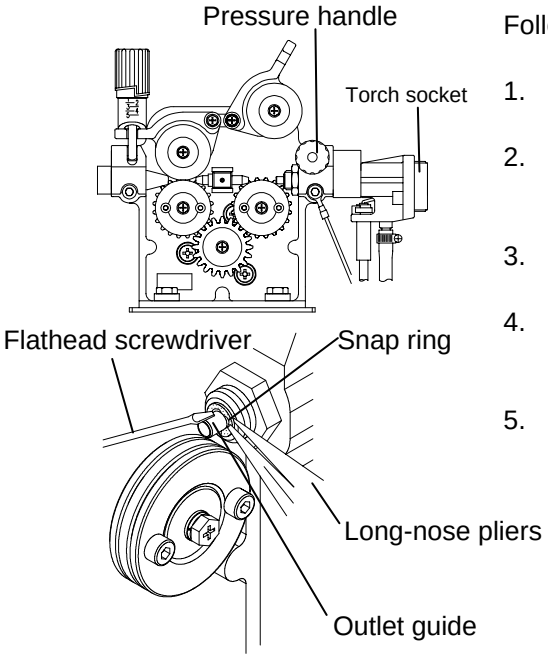
No.	Problem	Cause	Solution
1	Wire gets deformed.	Wire pressure is too strong.	Refer to "Recommended wire adjustment" in Section 7.2.
		Feed roll of wrong wire size is used.	Replace it with the feed roll of proper wire size.
		Feed roll and pressure roll are worn.	Replace the feed roll and the pressure roll with a new ones.
2	Wire is not fed.	Poor contact and breakdown in the control cable.	Check the socket. Check the cables and replace with new ones.
		Poor contact and breakdown in the encoder cable	
		Poor contact and breakdown in the voltage detection cable	
		Trouble with the motor	Replace the motor with a new.
		Wire pressure is too weak.	Refer to "Recommended wire adjustment" in Section 7.2.
		Dust and chip are accumulated on the outlet guide and on the feed roll.	Remove the dust and chip.
3	Pressure roll does not rotate smoothly.	Failure of the pressure roll holder.	Replace it with a new.
4	Shield gas is not supplied when pressing the torch switch.	The discharge valve is closed of the gas cylinder.	Open the valve.
		Lack of gas pressure in the gas cylinder	Check gas pressure.
		Failure of gas solenoid valve	After checking the gas solenoid valve, replace it with new ones.
5	Shield gas supply does not stop.	Failure of gas solenoid valve	Check the socket. Check the cables and replace with new ones.
6	Defective gas hoses	Crack in the gas hose	Replace them with new ones.
7	Wire does not fed smoothly through the wire reel.	Adjustment of the brake is either too strong or too weak.	Refer to "Adjustment of the wire reel hub" in Section 7.3.

8. MAINTENANCE AND TROUBLESHOOTING (continued)

< Schematic Diagram>



8.2 Replacing of the Outlet Guide



Follow the procedures below when replacing the outlet guide.

1. Bring down the pressure handle first, and then lift the pressure roll holder.
2. Forcibly insert a flathead screwdriver, etc. into the space between the outlet guide and the snap ring to remove the snap ring while holding the snap ring with long-nose pliers.
3. Remove the outlet guide by pushing it toward the torch socket.
4. Insert a new outlet guide from the direction of the torch socket, and then place the snap ring under the new outlet guide.
5. Return the pressure roll holder first, the pressure handle.

⚠ CAUTION
● **Never attempt to disassemble the feed motor. This may result in damage to the wire feeder.**
● **Never check the amount of brushing friction or replace the brush.**

Service life of the brush varies depending on ambient temperature, etc., but normally the service life is about 4,000 hours. (If the machine is operated for six hours a day, the service life of the brush will be about two years). Periodical replacement of the feed motor is recommended.

9. PARTS LIST

9.1 Main body and Wiring

- Please contact your local dealer to order parts. (See the back cover for telephone and fax numbers, and mailing addresses.)

Ref. No.	Part number CM-7401	Description	Q'ty	Remarks
1	U5185U00	Frame	1	Assembly
2	K970H90	Strike	2	
3	4739-013	Support	2	
4	U5185C01	Cover	1	With coating
5	U5185C02	Screw with knob	1	
5-1	3361-219	Washer	2	
6	U5185C03	Side plate	1	With coating and a screen
7	U5158C04	Rear cover	1	With coating
7-1	4739-490	Grommet with film	1	
7-2	4739-491	Grommet with film	1	
7-3	4739-489	Grommet with film	1	
8	U5185C05	Panel	1	With coating and a screen
9	U5185B00	Wire feeder	1	With a feed motor
10	U5185D00	Central adapter	1	Assembly
12	U5185N00	Power cable	1	Assembly
13	U5185J02	Power terminal block	1	
14	U5185J04	Terminal block bracket	1	
15	4739-492	Terminal block	1	
16	U5185X00	Encoder cable	1	Assembly
17	U5185F00	Motor cable	1	Assembly
18	U5185E00	Control cable	1	Assembly
18-1	4730-422	Metal socket	(1)	
19	4739-494	Wire reel hub	1	
20	U5185J07	Plate	1	
21	U5185J08	Clamp screw	1	
21-1	3361-405	E-snap ring	1	E-4
22	U5191B00	Common mode coil	1	Assembly
23	U5185J01	Cable clamp	1	
24	U1997C02	Hose clamp	1	
25	U1997C03	Hose cover	2	
26	U5185J05	Wire reel cover	1	

9. PARTS LIST (continued)

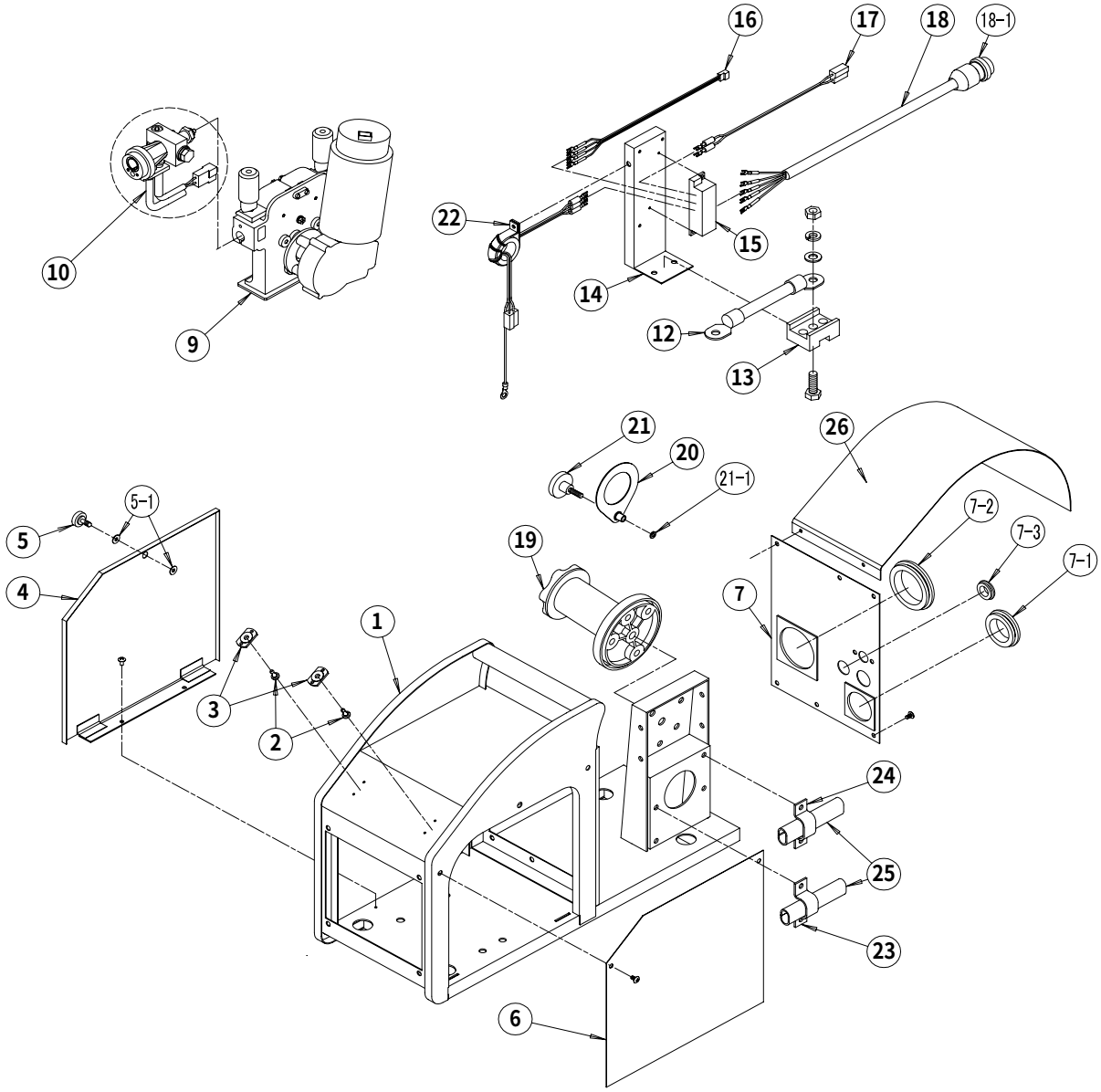


Fig. 1 Main Body and Wiring Assembly

9. PARTS LIST (continued)

9.2 Wire Feeder

Ref. No.	Part number	Description	Q'ty	Remarks
1	U5185B00	Bracket	1	
1-1	-	Hexagon socket cap screw	2	M6 x 25
2	U5185B08	Coil screw	1	
3	U5185B02	Pressure roll holder pin	2	
4	U5185S00	Pressure roll holder (R)	1	Assembly
5	U5185T00	Pressure roll holder (L)	1	Assembly
6	K5439C00	Pressure roll	2	Assembly
7	U5158B03	Driving roll shaft	2	
8	U5185P00	Gear	2	Assembly
9	U5439B00	Feed roll (1.0/1.2)	2	
9-1	-	Hexagon socket cap screw	4	M4 x 16
9-2	-	Bolt	4	M4 x 10
10	U5185B04	Guide block	1	
11	U5185B05	Center guide	1	
12	4802-206	Feed motor	1	
13	U5185B06	Insulating board	1	
14	U3971B04	Insulating bush	3	
14-1	-	Flat head screw	3	M6 x 20
15	U5185Q00	Drive gear	1	
16	U5185B09	Pressure screw holder	2	
17	U5185B12	Compression spring	2	
18	U5185B10	Pressure handle	2	
19	U5185B11	Pressure bolt	2	
19-1	-	Spring pin	2	2.5 x 14
20	U5185J06	Pilot	1	
21	U5185B13	Insulating bush	2	
21-1	-	Hexagon bolt	2	M8 x 30
22	U5185B14	Insulating board	1	

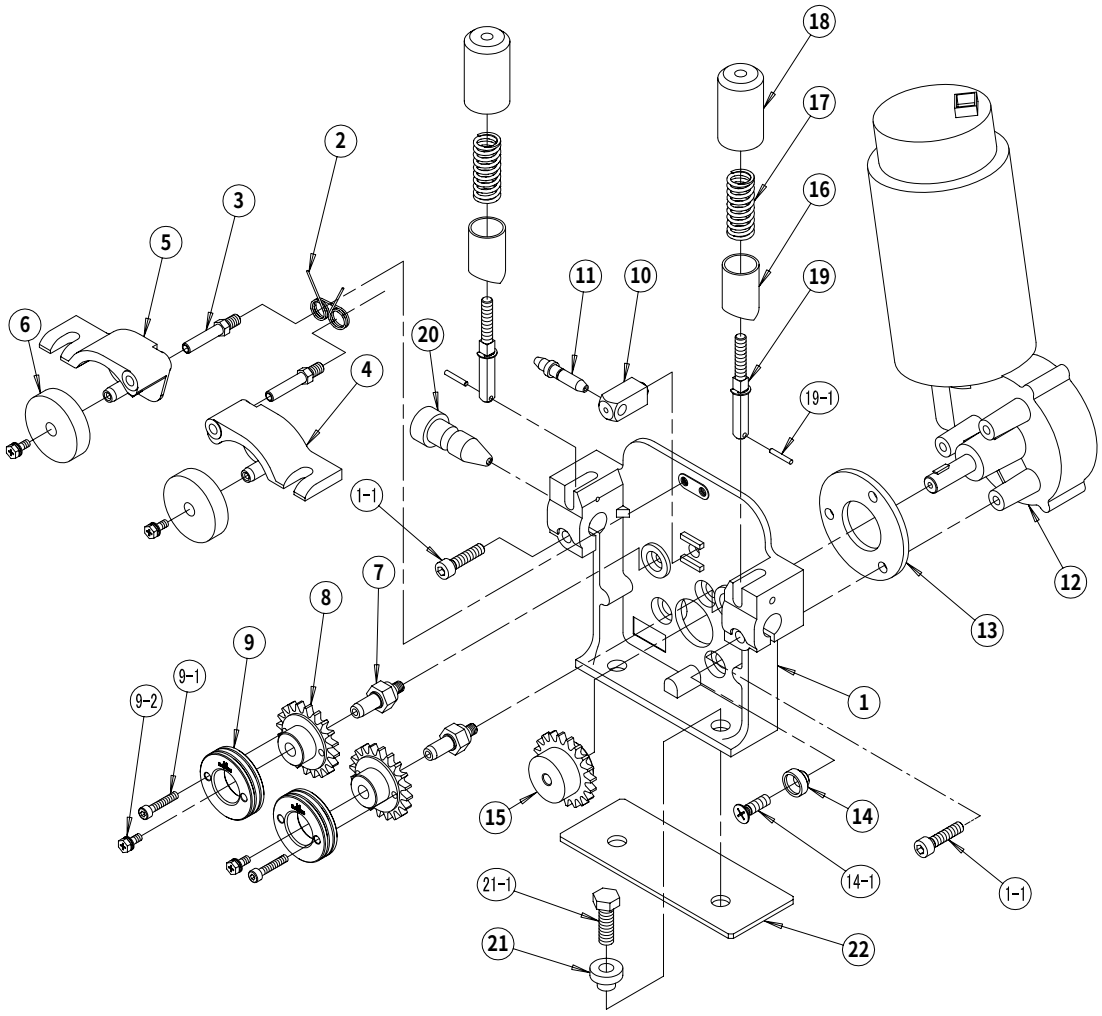


Fig. 2 Wire Feeder Assembly

9. PARTS LIST (continued)

9.3 Central Adapter

Ref. No.	Part number	Description	Q'ty	Remarks
1	U5185D01	Power metal	1	
2	U5185D02	Outlet guide (0.9-1.2)	1	E-snap ring
2-1	3361-405	E-snap ring	(1)	E-4
3	K3985E03	Block	1	
4	U5185D03	Feeder block	1	
4-1	-	Hexagon Socket cap screw	1	M8 x 25
5	U5185D04	Small nut	1	
6	K3985E04	Hose connector	1	
7	K3985E05	Sleeve	1	
8	U5185V00	Switch code	1	Assembly

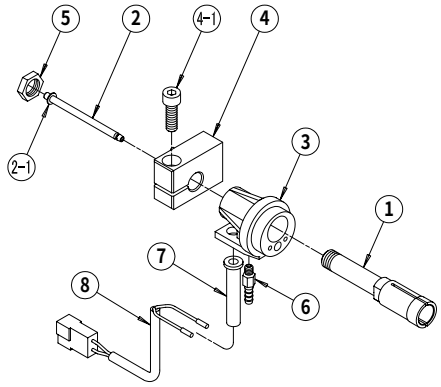


Fig. 3 Central Adapter Assembly

Ref. No.	Part number	Description	Q'ty	Remarks
1	4813-001	Gas solenoid valve	1	W-31156
2	U4179D01	Hose elbow	1	
3	U1997D01	Gas connector	1	
4	U1997D02	Flange	1	

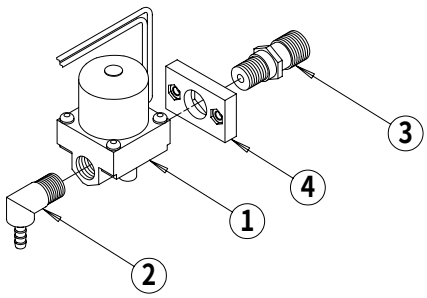


Fig. 4 Gas Piping Assembly

9. PARTS LIST (continued)

9.5 Optional Accessory

(1) Extension cable/hose
Power cable

Applicable current (Rated current)			200 A	350 A	500 A
Cable length	Cable termination		Model	Model	Model
2m	CSRT	CSRT	BKPT-3802	BKPT-6002	BKPT-8002
	CSRT	Connector	BKPDT-3802	BKPDT-6002	-
7m	CSRT	CSRT	BKPT-3807	BKPT-6007	BKPT-8007
	CSRT	Connector	BKPDT-3807	BKPDT-6007	-
12m	CSRT	CSRT	BKPT-3812	BKPT-6012	BKPT-8012
	CSRT	Connector	BKPDT-3812	BKPDT-6012	-
17m	CSRT	CSRT	BKPT-3817	BKPT-6017*	BKPT-8017
	CSRT	Connector	BKPDT-3817	BKPDT-6017*	-
22m	CSRT	CSRT	BKPT-3822	BKPT-6022*	BKPT-8022
	CSRT	Connector	BKPDT-3822	BKPDT-6022*	-

CSRT(Crimp Style Ring Terminal)
* When performing pulse welding using the welding power source with 350 A applicable current and a 17m or more cable, use the thicker cable by one rank. (BKPT-80XX, BKPDT-80XX)
Example:
When using a 22 m cable (crimp style ring terminal – DINSE connector)---BKPDT-8022

Control cable (10P)

	Cable length			
	5m	10m	15m	20m
Model	BKCPJ-1005	BKCPJ-1010	BKCPJ-1015	BKCPJ-1020

Gas hose

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

9. PARTS LIST (continued)

(2) Other Optional Parts

Part number	Description	Q'ty	Remarks
K5439B01	Feed roll (1.4/1.6)	2	
K5439B03	Feed roll (0.8/0.9)	2	
K5439B04	Feed roll (1.2/1.4)	2	
K5439B05	Feed roll (1.2/1.2)	2	
K5439B06	Feed roll (1.4/1.4)	2	
K5439B07	Feed roll (1.6/1.6)	2	
K5439B08	Feed roll (0.9/1.2)	2	
K5439B09	Feed roll (0.6/0.8)	2	
K5439B11	Feed roll (1.2/1.6)	2	
U5185D05	Outlet guide(0.6 - 0.9)	1	With E-snap ring
U5185D06	Outlet guide (1.2 -1.6)	1	With E-snap ring
U5191E00	Wire reel cover (simple)	1	
U5439E00	Wire reel cover (full)	1	Assembly
U5191F00	Reel adapter	1	
U5439F00	Caster	1	
U5191G00	Hanging bracket	1	
FCR-226 YR-507FD	CO_2 gas flow rate regulator (with heater)	1	Max. current rate: 25 λ/min
NP-201 YC-1G	CO_2 gas flow rate regulator (without heater)	1	Max. current rate:20 λ/min
FCR-100N	CO_2 gas large gas flow rate regulator	1	Max. current rate:100 λ/min
RF-16D	Argon gas flow rate regulator	1	For MAG gas 28 λ/min

10. SPECIFICATIONS

10.1 Specifications

Model		CM-7401(AIR COOLING)
Applicable wire size		(0.6)*, (0.8), (0.9), 1.0, 1.2, (1.4), (1.6)
Wire		Solid wire, Flux cored wire
Fire feeding rate		Max. 22 m/min
Applicable wire reel	Shaft diameter	ϕ50mm
	External diameter	Max. ϕ300mm
	Wide	103m
Quantity of applicable wire		Max. 25kg
Quantity		13 kg

*When using ϕ0.6 wire, add the welding mode (optional) to the welding power source.

10.2 Available Welding Torch

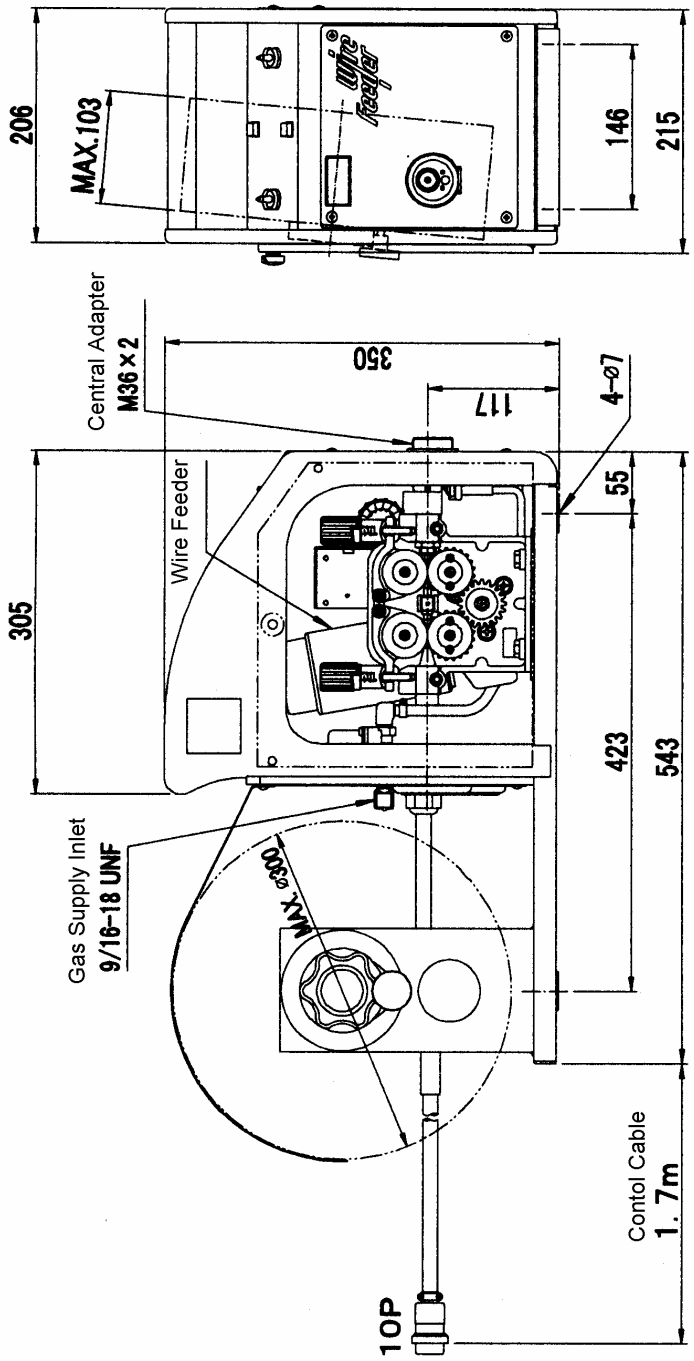
Rated current	Duty cycle	Cable length			
		3m	4.5m	6m	10m
180 A	40%	WTCX-1801	-	-	-
200 A	50%	WTCX-2001	WTCMX-2001*	-	-
350 A	30%	WTCX-3504	WTCMX-3504	WTCLX-3504	-
350 A	70%	WTCX-3503	WTCMX-3503	WTCLX-3503	-
430 A	70%	-	WTCMX-4301	-	WTCLL-4301
500 A	60%	WTCX-5002	WTCMX-5002	WTCLX-5002	-

*Cable length is 4m

10.3 Standard Accessory

Description	Part number	Quantity	Remarks
Pressure roll	K5439C00	(2)	Pre-installed
Feed roll (1.0/1.2)	K5439B02	(2)	Pre-installed
Gas hose	K5430A00	1	BKGFF-0603(3m)
Hose cover	U1997C03	2	Attached

10. SPECIFICATIONS (continued)



unit: mm

External View of CM-7401 Wire Feeder