

## **CM Series Magnets**



**Models** 

CM38ID

CM42ID

CM46ID

CM50ID

CM60ID

Parts & Operator's Manual CM-Series
Parts, Safety, Operation & Maintenance
Part #CME00010

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Contact your Connect Work Tools Representative or the Connect Work Tools Parts Department for replacement manuals. Inquiries regarding the content of this manual must include the release date shown below.

Information in this manual is subject to change without advance notice.

Table 1.1 About this manual

Document ID No.	CME00010
Type	Parts, Safety, Operation and Maintenance
Release Date	October 2023
Product Name	Hydraulic Magnet
Series	СМ
Applicable Models	CM38ID/CM42ID/CM46ID/ CM50ID/CM60ID
Years of Manufacture	2023 & above

#### Safety Statements and Hazard Alerts

Within this manual, you will find important safety information. The information will include specific information related to the Connect Work Tools attachment as well as the carrier. It is imperative that operators, maintenance personnel, or individuals loading or transporting the equipment read and understand the safety contents of this manual, as well as all safety decals and labels. Safety decals and labels must be kept legible and intact on the attachment. Replace damaged, missing or illegible safety labels or decals.

#### **Purpose of Safety Messages**

The reason safety messages and information has been included in this manual is most importantly to protect you and those individuals in the work area. Additionally, it is provided to eliminate damage to surroundings, attachments and the carrier due to incorrect operation and use or lack of maintenance of the equipment.

#### **Key Points before operating equipment**

- 1. Know your surroundings, survey the area prior to operation.
- 2. Know where the potential hazards are within the work area and notify personnel of those hazards.

Safety messages provide the following information:

- 1. Alert personnel to potential hazards
- **2. Identify** the nature of the hazard
- **3. Describe** the severity of the hazard, if encountered
- 4. **Instruct** how to avoid the hazard

#### ATTENTION, BECOME ALERT, YOUR SAFETY IS INVOLVED.

#### Signal Words

Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a lifethreatening situation, bodily injury or damage to equipment.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



This safety alert and signal word indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



This safety alert and signal word indicates a potentially **AWARNING** hazardous situation which, if not avoided, could result in death or serious injury.



This safety alert and signal word indicates a potentially **ACAUTION** hazardous situation which, if not avoided, <u>may</u> result in <u>minor</u> or moderate injury.

NOTICE

This signal word indicates a potentially hazardous situation which, if not avoided, may result in property damage or damage to the equipment.

IMPORTANT

This signal word indicates a situation which, if not avoided, may result in damage to the equipment.

Fig. SI.1 Safety Signal Words



#### **CAUTION**

Burn injury from contact with hot surface. Some components of the Breaker become hot during operation. Allow parts and fluids to cool before handling.

Fig. SI.2 Safety Message

#### Signal Words Used for Non-Hazard Messages

This manual contains other message types that use the signal words IMPORTANT and NOTE. These are informational messages that provide instructions and are not considered hazardous to workers.

**IMPORTANT** - Identify instructions that if not followed, may damage the equipment or diminish the service life of components.

**NOTE** - Highlight suggestions, which will enhance installation, reliability, or operation.

#### Safety, Information and Identification Labels

Information labels affixed to the Connect Work Tools equipment include safety warnings, identification and instructions important to operation and service.

Keep all safety & identification labels clean. Words and illustrations must be legible.

Before operating this equipment, replace damaged or missing labels. For replacement, refer to the appropriate Parts Manual for identification.

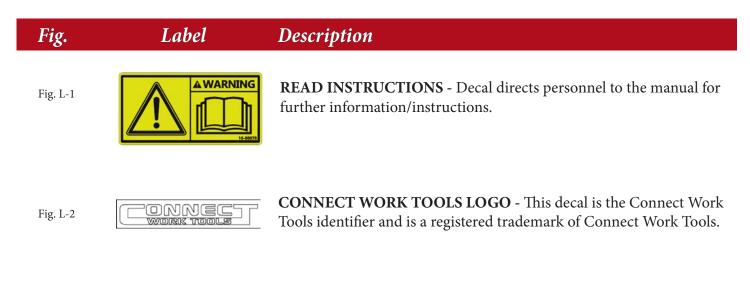


Fig. L-3



**SERIAL PLATE** - Contains identifying information about the equipment, including: Manufacturer's name, Model number, Serial number, Oil flow, Operating pressure, Product weight, Power, Voltage, Date manufactured.

#### **Meaning of Pictograms**

Pictograms are used to rapidly communicate information. For the purposes of this manual and labels affixed to the Connect Work Tools equipment, pictograms are defined as follows:



- Read the Manual
- Refer to the manual for further details
  - Procedures are explained in the manual



Read the Service Manual for Additional Information



Crush Point



Pinch Point



Moving part (in direction indicated by arrow)



- Falling object
- Unsupported loads

Personal Protection Equipment



Hearing Protection



Safety Eyewear



Gloves



- Safety Shoes
- Falling Part



Personnel maintain a safe distance from breaker



Fragments/debris becoming airborne projectiles



Protective guards required on cab when operating this work tool



Leaking fluid under pressure



**Hot Surfaces** 



Gas/Oil under pressure



Shut off carrier & remove key before servicing



Identifies lift point



Any figure displaying an X-out or a circle with a diagonal slash is a prohibited action



Prohibited actions must be avoided to prevent injury and/or equipment damage



The check mark is used to indicate correct actions or approved methods that are recommended

#### **Attention Read the Manual**





Improper installation, operation or maintenance of the Connect Work Tools Equipment could result in serious injury or death. Only qualified operators may operate the Connect Work Tools equipment. Personnel responsible for the maintenance of the Connect Work Tools equipment or its systems, including inspection, installation or adjustments must also be qualified. Operators and personnel responsible for the maintenance of this equipment should read this manual. Other manuals, such as those published by the machinery used in support of the Connect Work Tools equipment, should also be read.

#### **General Construction Safety**

Always follow procedures that promote safe conditions for workers and bystanders. The standard safety precautions expected and required of those working in construction shall include, but not limited to:

- Locating existing underground service and utility lines
- Establishing pedestrian barriers
- Using personal protection equipment appropriate to working conditions, etc.

#### **Owner's Responsibilities**

Ensure that only qualified personnel operate and service the Connect Work Tools equipment.

Ensure personal protection equipment is available to personnel and enforce the use of PPE.

Ensure that carriers are in safe, working order and all guards and safety equipment is installed and in operating condition.

Ensure safety-related materials such as instructions and including this manual are kept in a convenient location so that they are easily accessible to operators and maintenance personnel.

#### **Personal Protective Equipment (PPE)**









Personnel operating or nearby the equipment and exposed to the hazard of falling, flying and splashing objects, or exposed to harmful dusts, fumes, mists, vapors, or gases shall use the particular personal protective equipment (PPE) necessary to protect them from the hazard. Such PPE may include safety eyewear, face shield, hearing protection, safety footwear, gloves and dust mask. Supervisors shall review proper PPE selection and ensure PPE is made available to personnel. Personnel are responsible for wearing PPE as directed by the supervisor.

#### Protective Equipment - Guarding









Construction equipment designed with guards shall have guards in place when equipment is in use. Guards are fitted to the equipment to protect against unsafe situations that could not be eliminated through design measures. Where it was not possible to prevent an unsafe situation by means of a guard, safety messages appear on the equipment, warning personnel of a hazardous condition.

Guards shall not be removed unless for the purpose of inspection and service of components. All guards must be reinstalled after service or adjustments are completed. Do not operate the Connect Work Tools attachments without guards.

Additional guarding, not included with the Connect Work Tools equipment, is necessary at the operator's station to protect the operator and other nearby personnel against flying debris from material being cut or demolished. Do not handle, demolish or cut material overhead without proper guards installed.

To prevent accidental start up, the control switch shall be located in a protected area that is guarded and makes it difficult to accidentally operate the equipment.

#### **Unapproved Modifications**



In order to provide and maintain efficient production and reliable service, while ensuring operator safety, the Connect Work Tools equipment may not be modified or used for any other purpose other than, for which it was intended. Use of the Connect Work Tools equipment, other than those specified in this manual, may place personnel at risk of injury and/or may subject the equipment to damage. The Connect Work Tools equipment shall not be modified or used in unapproved applications unless written consent is received from the Connect Work Tools Engineering Department.

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### **General Information**

#### 1. Introduction





#### **Preface**

This manual will provide an understanding of the Connect Work Tools Magnet by providing instructions for safe and effective operation and instructions for regular maintenance activities of the magnet in addition to parts information.

Before installation or operation of the magnet for the first time, please read and understand this manual.

The specifications and designs presented in this manual are subject to change without prior notice.

#### 2. Safety Precautions

#### Operation

- Operate the magnet for its intended purpose only.
- Operate the magnet only when the operator is seated in the cabin with full control of the machine.
- No bystanders are allowed in the vicinity of the magnet when it is operating. Debris can cause serious injury to bystanders.
- Stay clear of the compactor when it is operating.
- Before operating the magnet, read and follow the safety decals located on equipment.
- Be sure that all decals are clearly visible. Clean and replace as necessary.

#### **Protective Equipment**

 Always wear the following personal protective equipment: safety glasses, ear protection, protective gloves and protective shoes.









#### **Heat Caution**





- Never touch the hot parts. Wait for them to cool down first if you have to touch them.
- Hot hydraulic oil can cause burns. Never use your fingers to check for hydraulic fluid leaks and always keep your face away from a possible leak.

### 1.0 Specifications

### 1.1 Magnet Specifications

		CM Se	ries Magnet	S		
Models	Units	CM38ID	CM42ID	CM46ID	CM50ID	CM60ID
Machine Weight	US Ton/ (kg) min.	15 (14,000)	17 (15,422)	20 (18,144)	24 (21,772)	32 (29,030)
Machine Weight	US Ton (kg) max.	22 (20,000)	25 (22,680)	28 (25,401)	35 (31,751)	45 (40,823)
Min. Flow GPM (liters/min)	GPM (liters/min)	16 (60)	19 (72)	22 (83)	27 (102)	32 (121)
Max. Flow GPM (liters/min)	GPM (liters/min)	34 (130)	37 (140)	37 (140)	40 (151)	40 (151)
Diameter	Inches (mm)	38 (960)	42 (1,067)	46 (1,168)	50 (1,270)	60 (1,524)
H base	Inches (mm)	10 (260)	10 (254)	11 (279)	11 (279)	12 (305)
H including Chain & Plate	Inches (mm)	29.5 (850)	32 (813)	32 (813)	32 (813)	32 (813)
Power (kW)	kW	4.5	5.5	6	7.5	12
Weight	lbs (kg)	2650 (1200)	3,197 (1,450)	3,417 (1,550)	4,079 (1,850)	6,393 (2,900)
Voltage	(V)	220	220	220	220	220

<sup>\*</sup> The above technical specification can be changed without prior notice.

Fig. SI.3 Magnet Specifications

### 1.0 Specifications

### 1.0. Magnet Layout

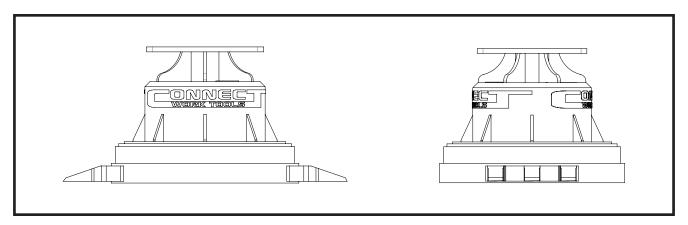


Fig 1.2 Magnet Layout

### 1.3. Characteristics

- **✓** Well-designed and robust structure
- ✓ Excellent durability by use of high-tensile steel
- **✓** Excellent magnetics
- **✓** High performance
- Easy mounting and dismounting

### 2.0 Installation

#### 2.1. Mounting and Dismounting

- 1. Verify machine specifications for correct CM series magnet model.
- 2. Mount the bracket using proper torque specifications, pin magnet to machine.
- 3. Use hoses equal to or greater than -12 with a minimum pressure rating of 3000 psi (200 bar).
- 4. Add the test circuit.
  - a. Connect the input pressure line to a flow meter and regulator. Connect the return line to the other side of the flow regulator.
  - b. Verify machine flow output. Minimum to maximum flow range from 15-40 GPM (57-151 lpm) depending on CM magnet series model. Check flow range on serial number tag.
- 5. Once the necessary flow is achieved, add hydraulic the jump lines to pressure line (P) and the return line (T). If hoses are inverted, an internal control valve will prevent flow to the generator.
- 6. Remove the magnet inspection window. This will reveal the voltage reading from the generator.
- 7. Energize the magnet.
  - a. CM series magnets run off constant flow with variable pressure. During operation, constant flow maintains the magnetic field.
  - b. Voltage should range from 200-240 V.
  - c. A set of 4 to 7 capacitors will discharge energy when flow is stopped.
- 8. If voltage parameter is not met, verify machine circuit.
  - a. Try alternative and summation pumps if voltage drops lower when travel and cylinder systems are used.
  - b. Use troubleshooting procedure if the voltage is above or below the prescriped threshold.
- 9. Reinstall inspection window, following safety precautions during operation.

### 3.0 Safety Precautions & Operating Instructions

### Safety Precautions



Do not perform inspection or maintenance work when the engine of the carrier vehicle is running. It is required that there be two qualified personnel to perform inspections. One of the personnel will operate the vehicle, and the other person to check the operation of the magnet. During this inspection, do not touch the magnet or allow any part of the body or clothing come into contact with it.

#### 3.1 Noise:

The noise produced by the hydraulic magnet generator is 90dB measured at 3 ft (1 meter) from the magnet. Anyone approaching the hydraulic magnet in operation for maintenance purposes must utilize suitable hearing protection. Under normal operating conditions, it is forbidden to come within 66 ft (20 meters) of the hydraulic magnet.

#### 3.2 Vibrations:

The hydraulic generator generates minimal vibrations, normally acceptable on excavators where it is mounted.

#### 3.3 Electromagnetical Compatibility - Effects on Workers

The hydraulic magnet is a powerful magnetic field generator. The intensity of the magnetic field it generates decreases with the distance from the magnet and at a distance of 6 ft (2 meters), it is not dangerous for personnel.

However, to avoid dangerous consequences you must:

- avoid approaching the magnet with ferromagnetic objects in your hands, as they may be attracted and cause crushing;
- avoid approaching the magnet with electrical or electronic safety devices, measuring instruments and watches as they may be disturbed and/or magnetized;
- keep computers, monitors, credit cards, records, audio and videotapes, magnetic cards, etc. at a safe distance a minimum of 6 ft (2m).

The personnel in charge must point out the danger to uninformed personnel who may inadvertently approach the site.



Warning signs indicating that there is danger of magnetic fields must be placed at a suitable distance to warn all operators and non-operators of the dangers of the magnetic fields.



It is strictly forbidden for people who are sensitive to magnetic fields (people with pace-makers, active or passive implants, metal prostheses, pregnant women, etc.) to approach the operating hydraulic magnet at a distance of less than at a distance of less than 6 ft (2 meters).

### 3.0 Safety Precautions & Operating Instructions

**AWARNING** 

☑ Do not use the magnet to crush objects, this could cause damage to the equipment

### 3.4 Safe Use:

#### 3.4.1 Conditions of the Operators

Operators must be fit for work and psychological and physical capabilities of attending to the requirements of magnetic related activities during all phases of operation. The operator assigned to the magnet must position themselves in a way that does not pose a risk to their own safety when carrying out maintenance work, anticipating and avoiding possible dangerous movements.

#### 3.5 Operation

- a) Be aware of any object which could be dangerous during operation.
- b) Verify the oil flow and if necessary, adjust the flow control valve.
- c) Open the stop valve on the excavator's arm.
- d) Run the magnet before operation until the oil temperature reaches 120°-175°F (50°C~80°C).
- e) During operation, do not apply too much down pressure with the boom.

### **AWARNING**

- If it is necessary to change any damaged parts, replace them only with original Connect Work Tools genuine spares.
- ✓ When installing bolts, first check and clean them.
- Coat the threaded area with Loctite Red 271 and tighten them according to the bolt torque table in section 4.4.

### 4.0 Inspection and Maintenance

### 4.1 Cleaning the hydraulic magnet

- \* Cleaning must be carried out by specialized personnel and is periodically necessary to free the structure, mechanisms, command and control devices from accumulations of dust or dirt.
- \* Cleaning can be done using the means, equipment and detergents commonly used for general cleaning of industrial equipment (avoiding the use of acidic substances, solvents or aggressive detergents such as caustic soda).
- \* Clean by removing foreign substances and soiling with vacuum cleaners, absorbent cloths, etc.
- \* Do not use water jets to clean the electromagnet.

#### 4.2 Routine Maintenance

Routine maintenance operations are fairly limited but must be carried out by qualified personnel.

Every 100 working hours it is necessary to:
☑ Check the integrity of the welds on the magnet body and the cover; if cracks are found, contact the manufacturer.

Check the integrity and correct tightening of the screws that secure the bell to the magnetic base; if they are loose, retighten them correctly.

☑ Check the integrity of the chains or other means of attachment of the hydraulic magnet to the excavator; if signs of wear are found, it is necessary to replace these means of attachment

Check to make sure that the safety stickers are present; if they are missing/damaged they must be replaced; make sure that the identification plate is present and readable; if it is lost/unreadable, contact the manufacturer:

Every 1000 working hours it is necessary:

	After ensuring that at least 30 minutes have elapsed since the last demagnetization co	mmand,
remo	ove the cover by unscrewing the sealing screws and the connection tubes.	

Then check that the interior is clean and that all generator unit screws are tightened correctly. If
necessary, clean the components of the generator block and tighten the screws. Do not dismantle the
electronics block!

Re-assemble the cover by fixing it with the screws, which must be tightened with a torque spanner with the appropriate torque, and connect the connection tubes.

### 4.0 Inspection and Maintenance

#### 4.3 Repairing Faults Inspection

In the event of a failure or malfunction of the hydraulic magnet, the user can carry out a pre-diagnosis of the failure by following the trouble shooting chart on Illustration 4.6. The troubleshooter should enter the diagram at the point that corresponds to the (abnormal) behaviour of the magnet and cascade downwards by performing the indicated actions or answering the indicated questions, and then moving further down along the diagram according to said response. In some cases, actions or measurements will have to be performed before the answer can be given.

If the pre-diagnosis performed does not enable the possible cause of the failure to be identified, the user should contact Connect Work Tools for further technical assistance. The user should also contact the Connect Work Tools when the troubleshooting procedure leads to the identification of a failure that cannot be immediately and easily repaired.

In all cases where the user contacts the manufacturer (or its local dealer), the user must have the following information available:

- a.) Model of hydraulic magnet
- b.) Serial number
- c.) Make and model of the excavator on which the magnet is installed
- d.) A detailed description of the issue or anomaly
- e.) Any other useful information

Connect Work Tools will give instructions on how to proceed or will prepare to intervene.

### 4.4 Assembling

Metric Fasteners							
Fastener I	Property Class	10.9	12.9	10.9	12.9	10.9	12.9
Thread Treatment		Dry		Loctite 242 or 271		Anti-Seize	
Basic Major Dia. (mm)	Thread Pitch (mm/thread)	Torque	(Ft*Lbf)	Torque	(Ft*Lbf)	Torque	(Ft*Lbf)
10	1.5	53	62	61	72	40	47
12	1.75	93	109	107	125	70	81
14	2	148	173	170	199	111	130
16	2	231	270	265	310	173	202
20	2.5	450	526	517	605	337	394
22	2.5	612	715	704	823	459	537
24	3	778	909	895	1,046	583	682
27	3	1,138	1,330	1,309	1,530	854	998
30	3.5	1,546	1,806	1,777	2,077	1,159	1,355

Fig 4.1 Torque Specifications

### 4.0 Inspection and Maintenance

### 4.5 Normal Inspection

- ☑ Before operating the magnet, read the contents and safety information contained in this manual
- ☑ Check for oil leakage in the hydraulic lines and change any damaged or faulty parts
- ☑ Check the condition of mounting bracket and pins
- ☑ Check the structure for cracks. If welding is necessary, please check with the manufacturer before starting
- ☑ Before operation, check the oil levels in the housing

#### 4.6 Maintenance Schedule

	Maintenance Schedule
Daily	Check the hydraulic lines for leaks.
	Tighten the screw connection to the adapter plate.
	Check the connection to the carrier (bolts, lock pins).
	Check the rubber isolators for cracks.
Weekly	✓ Check the screw connections and tighten as required
	Check the oil quantity in the housing.
	Check the housings and the adapter plate for cracks.
	Clean the unit.
If Necessary	Replace any or all damaged hoses.
	Check the adapter plate bolts for wear.
Once a year	Change the oil in the housing.

Fig 4.6 Maintenance Schedule

### 5.0 Magnet Hydraulic Circuit

### 5.1 Magnetic Hydraulic Circuit

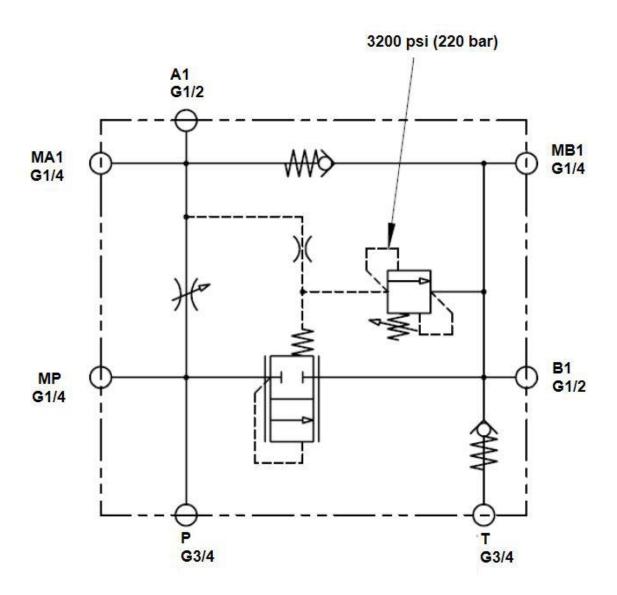


Fig. 5.1 Magnetic Hydraulic Circuit

### 6.0 Troubleshooting

### 6.1 Troubleshooting Chart

Problem	Possible Cause	Remedy	
	<50V or off	If voltage at input of the electronic controller in 180V AC, replace the controller box	
	Between 150V and 250V	Check coil continuity	
Magnet not picking up debris	>250V	Replace IGBT	
	0 1 1001/40	Replace controller box	
	Generator voltage >180V AC (controller box must be disconnected from generator)	Improve hydraulic parameters	
	Incorrect flow rate or pressure	Check hydraulic parameters	
Hydraulic motor is not running	Generator RPM <2600	Clean valve block or replace elastic valve block joint	
or rotating very slow	Generator RPM >2600	Replace controller box	
	Generator neivi >2000	Replace generator	

Fig. 6.1 Troubleshooting Chart



## **CM Series Magnets**



**Models** 

CM38ID

CM42ID

CM46ID

CM50ID

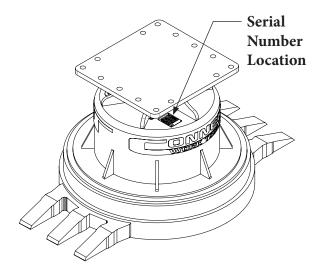
CM60ID

## Parts Manual CM-Series

Connect Work Tools - www.connectworktools.com - 920.238.6657

### **Equipment Identification**

#### Location of the Serial Number Decal



The Serial Equipment Identification Decal is affixed to the top side of the magnet. It provides the following information:

Model Number;

Serial Number;

Oil Flow;

Pressure;

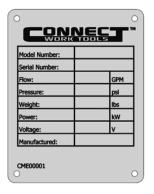
Weight;

Power;

Voltage;

Date manufactured

\*\*Note: Prior to ordering parts, it's important to confirm your model and serial number



### Owner's Record of the Equipment

Record the Model and Serial Number from the Serial Equipment Identification Tag to the space provided below. Indicate the date in which the Connect Work Tools equipment was placed into service.

Model CM38: CM38ID

Model CM42: CM42ID

Model CM46: CM46ID

Model CM50: CM50ID

Model CM60: CM60ID

Serial Number:	

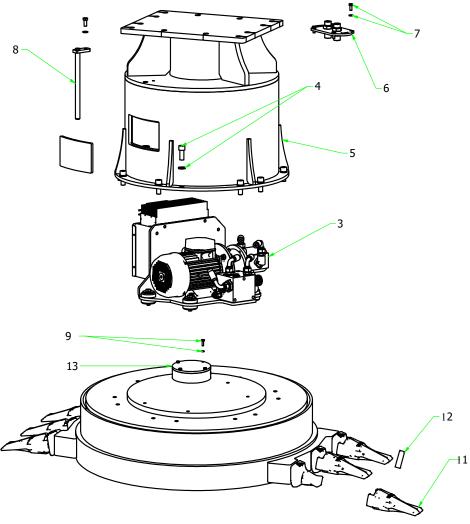
In Service Date:	

Your Connect Work Tools representative requires this information to better assist you with questions regarding parts, warranty, operation, maintenance, or repair.

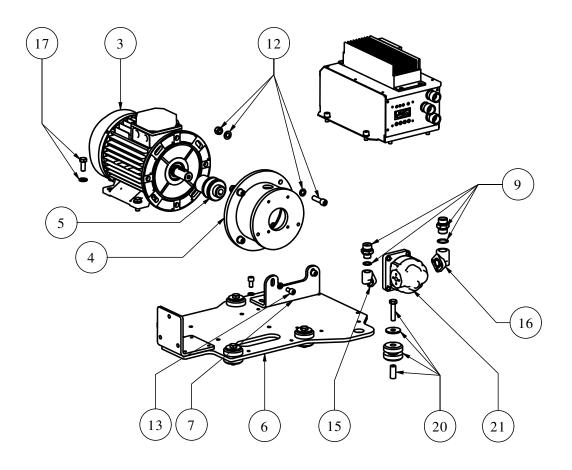
Your equipment must be registered by your local Distributor at the time of sale.

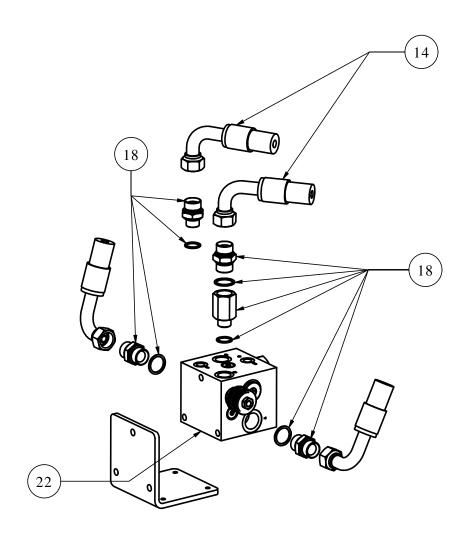
Product Registration Date:	

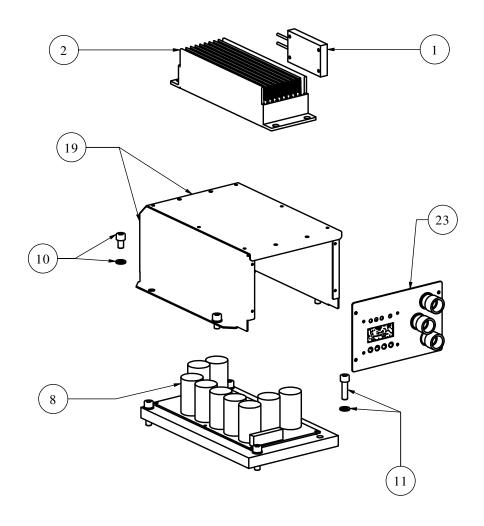
### CM38 - Magnet Assembly



NO	PART NO.	PART NAME		REMARKS
1	CMDPT002_ESC	TEETH TIP	4	
2	CMSP02_ESC	TEETH PIN	4	
3	CMGCM01A75	HYDRAULIC GENERATOR SET	1	
4	CMKIT75V002	COVER SCREWS - SET OF 12	1	
5	CMCOP003P	MAGNET COVER	1	
6	CMPSP-008-PT	PASS THROUGH PLATE	1	
7	CMKIT75V002	PASS THROUGH PLATE SCREWS - SET OF 4	1	
8	CMPRN_COP	COVER PIN	1	
9	CMKIT114V003	SCREWS OF CONNECTION SOCKET CAP - SET OF 4	1	
10	CMCOP003C	MAGNET COVER WITH CHAIN	1	
11	CMDPT002_ESC	TEETH TIP	1	
12	CMSP02_ESC	TEETH PIN	2	
13	CMCOP_U.C	CONNECTION SOCKET CAP	1	

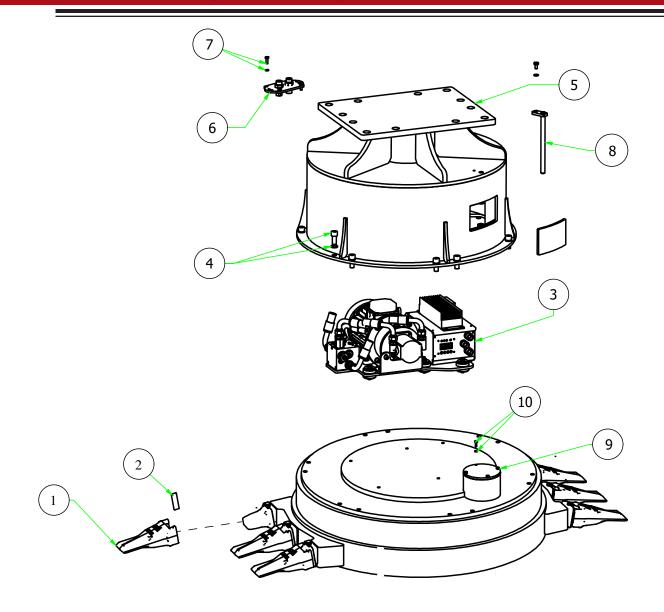




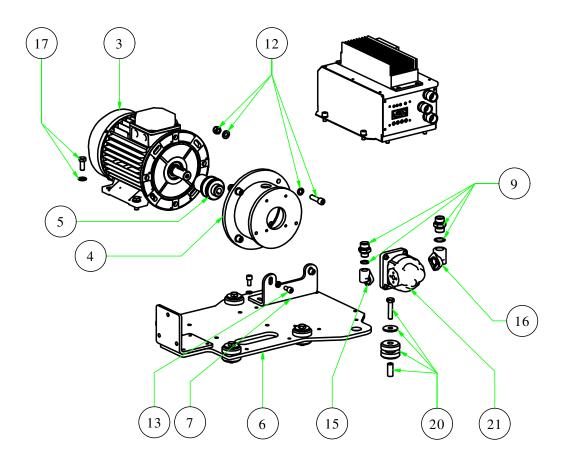


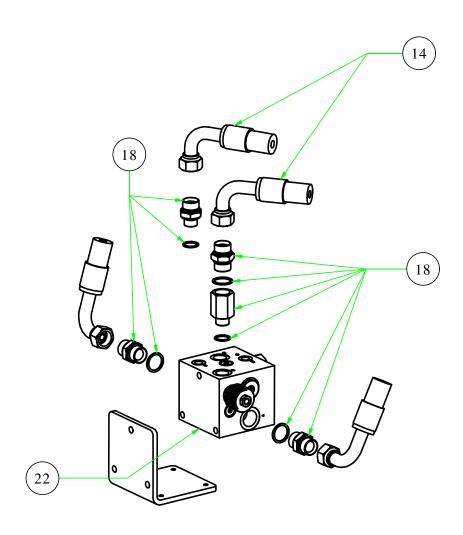
NO	PART NO.	PART NAME	QTY	REMARKS
1	CMRST001	RESISTOR	1	
2	CMRST002	RESISTOR	1	
3	CMGNCC001.ST	ELECTRIC GENERATOR	1	
4	CMLMI.006	MOTOR-TO-GENERATOR BELL HOUSING	1	
5	CMGIUNTO.EL.M	ELASTIC JOINT	1	
6	CMPGCM.003.1	GENERATOR-SET BASE PLATE	1	
7	CMSSL.004	BELL HOUSING HOLDER	1	
8	CMSCCM.7C	MOTHERBOARD GROUP	1	
9	CMKIT105GCM008	HYDRAULIC MOTOR NIPPLE SET	1	
10	CMKIT105GCM002	CONTROLLER COVER SCREWS SET	1	
11	CMKIT105GCM003	HEATSINK AND MOTHERBOARD SCREW SETS	1	
12	CMKIT105GCM004	BELL HOUSING-TO-GENERATOR SCREW SET	1	
13	CMKIT105GCM005	BELL HOUSING HOLDER SCREWS SETSCREWS SET	1	
14	CMKIT105GCM010	HOSES SET	4	
15	CMCP912	HYDRAULIC MOTOR FITTING	1	
16	CMCP934	HYDRAULIC MOTOR FITTING	1	
17	CMKIT105GCM006	ELECTRIC GENERATOR SCREWS SET	1	
18	CMKIT105GCM009	VALVE FITTINGS SET	1	
19	CMCART.EL.	ELECTRONIC CONTROLLER COVER	2	
20	CMKIT105GCM007	RUBBER MOUNTS SET	1	
21	CMPPI01	HYDRAULIC MOTOR	1	
22	CMVLVI01.ST	HYDRAULIC VALVE BLOCK	1	
23	CMDISP49	LOGIC BOARD WITH DISPLAY	1	

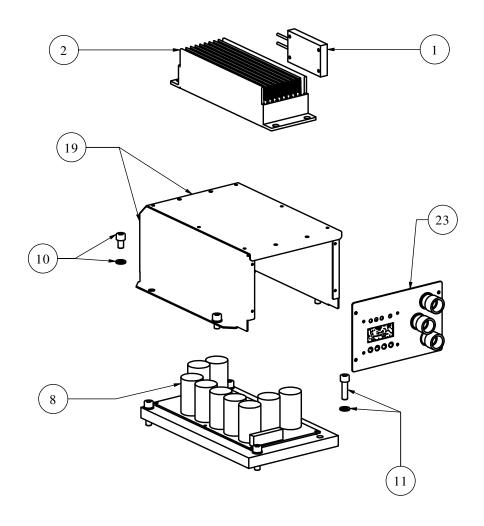
### CM42 & CM50 - Magnet Assembly



NO	PART NO.	PART NAME	QTY	REMARKS
1	CMDPT001_ESC	TEETH TIP	6	
2	CMSP_ESC	TEETH PIN	6	
3	CMGCM01A04	HYDRAULIC GENERATOR SET	1	
4	CMKIT114V001	COVER SCREWS - SET OF 12	1	
5	CMCOP002P	MAGNET COVER	1	
6	CMPSP-007-PT	PASS THROUGH PLATE	1	
7	CMKIT114V002	PASS THROUGH PLATE SCREWS - SET OF 4	1	
8	CMPRN_COP	COVER PIN	1	
9	CMCOP_U.C	CONNECTION SOCKET CAP	1	
10	CMKIT114V003	SCREWS OF CONNECTION SOCKET CAP - SET OF 4	1	







NO	PART NO.	PART NAME	QTY	REMARKS
1	CMRST001	RESISTOR	1	
2	CMRST002	RESISTOR	1	
3	CMGNCC001.ST	ELECTRIC GENERATOR	1	
4	CMLMI.006	MOTOR-TO-GENERATOR BELL HOUSING	1	
5	CMGIUNTO.EL.M	ELASTIC JOINT	1	
6	CMPGCM.003.1	GENERATOR-SET BASE PLATE	1	
7	CMSSL.004	BELL HOUSING HOLDER	1	
8	CMSCCM.7C	MOTHERBOARD GROUP	1	
9	CMKIT105GCM008	HYDRAULIC MOTOR NIPPLE SET	1	
10	CMKIT105GCM002	CONTROLLER COVER SCREWS SET	1	
11	CMKIT105GCM003	HEATSINK AND MOTHERBOARD SCREW SETS	1	
12	CMKIT105GCM004	BELL HOUSING-TO-GENERATOR SCREW SET	1	
13	CMKIT105GCM005	BELL HOUSING HOLDER SCREWS SETSCREWS SET	1	
14	CMKIT105GCM010	HOSES SET	4	
15	CMCP912	HYDRAULIC MOTOR FITTING	1	
16	CMCP934	HYDRAULIC MOTOR FITTING	1	
17	CMKIT105GCM006	ELECTRIC GENERATOR SCREWS SET	1	
18	CMKIT105GCM009	VALVE FITTINGS SET	1	
19	CMCART.EL.	ELECTRONIC CONTROLLER COVER	2	
20	CMKIT105GCM007	RUBBER MOUNTS SET	1	
21	CMPPI01	HYDRAULIC MOTOR	1	
22	CMVLVI01.MD	HYDRAULIC VALVE BLOCK	1	
23	CMDISP49	LOGIC BOARD WITH DISPLAY	1	



### **CM Series Magnets Limited Warranty**

Connect Work Tools offers this warranty to owners of new Connect Work Tools equipment that, after delivery and placement into service by the first user, the authorized Connect Work Tools Distributor in whose service area the product is operated will repair or replace any part that fails because of defects in material or workmanship. Connect Work Tools warranty covers new or original equipment only. This warranty does not apply to used equipment, that has been in service beyond the new product warranty period.

#### STANDARD RATE SCHEDULE

The following rate schedule is in effect and will be applied when evaluating and processing all related requests.

## Warranty Coverage: CM38ID - CM42ID - CM46ID - CM50ID - CM60ID

Months	Parts	Labor
0-12	No Change	No Change

Connect Work Tools guarantees that the product shall be free from defects in materials or workmanship for a period of 12 months of installation date or 18 months from invoice date, whatever comes first.

Before submitting a warranty claim, make sure the attachment qualifies and meets the guidelines for warranty consideration.

Prior to performing a warranty action and submitting Connect Work Tools warranty claim the distributor must obtain pre-approval and a warranty claim number.

Contact the Connect Work Tools Customer Service Department at: 920-238-6657 or Email: service@connectworktools.com

Notes			



# Parts & Operator's Manual Parts, Safety, Operation & Maintenance

Connect Work Tools - www.connectworktools.com - 920.238.6657



920.238.6657

www.connectworktools.com