

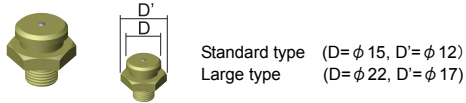
## 7. Types of Grease Fittings

- Hydraulic fittings  
JIS B 1575



In general, hydraulic fittings are most commonly used as the lubrication points for bearings. These fittings are available in straight and angle types to be selected by installation location.

- Buttonhead fittings



Standard type (D=φ 15, D'=φ 12)  
Large type (D=φ 22, D'=φ 17)

Buttonhead fittings are commonly used as the lubrication inlets for construction equipment. These fittings are available in two types large and small in button diameter.

- Pin-type fittings



Pin-type fittings are used as the lubrication inlets for farm equipment and railway vehicles. This type may be installed inside a concave element and sealed above.

The heads of grease fittings are common to Japan, US, and Germany as specified in JIS, SAE, and DIN, respectively. Our products are manufactured in accordance with the relevant JIS standards. Note, however, that recently some dimensions do not conform to the standards.

Manufactured by  
**YAMADA CORPORATION**

INTERNATIONAL DEPARTMENT

No.1-3, 1-Chome, Minami-Magome, Ohta-ku, Tokyo, 143-8504, Japan

PHONE : +81-(0)3-3777-0241

FAX : +81-(0)3-3777-0584

201006 OSA044U

Original Instructions

Doc.No. OSA044U-03

# Yamada

## Grease Gun User's Manual (KH·CH·GC Series)

### 1. Introduction

Thank you very much for purchasing a Yamada's grease gun. This document describes how to use your grease gun correctly to get the most out of it without malfunctioning and provides some notes on use. The grease gun looks partly discolored because of "trivalent chromium plating" (for environmental protection). However, there is no problem with its function.

### 2. Warnings and Cautions

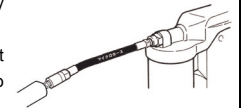
The grease gun discharges grease at a high pressure. Discharging it toward your hand or any other person may result in serious injury. When using the grease gun, take the following precautions.

#### WARNINGS

- Before using the grease gun, always make sure that the greasing nozzle, greasing hose, screws, or any other part do not have any damage.
- Before greasing, be sure to put on safety glasses and thick gloves (such as leather gloves).
- If the lever of the grease gun feels heavy or its tip leaks grease, remove the cause before greasing without forcing grease into the grease fitting.
- Should grease intrude into your body or get into your eyes, seek immediate medical attention from a specialist and take proper treatment. Grease adhering to the skin can cause inflammation and thus must be washed out sufficiently with water and soap.

#### CAUTIONS

- Do not touch the nozzle or hose during greasing as it may be highly pressurized inside depending on the greasing point.
- The hose used in place of the greasing nozzle is deteriorated as it serves. It is advisable to replace the hose with a genuine part every two years.



### 3. Specifications

Product No.	Model	Overall Length (mm)	Weight (kg)	Grease Cylinder Diameter	Capacity	Discharge/Stroke (mL)	Maximum Pressure (MPa)
854297	GC-57K	411	1.70	56.5	500(Combined to 420mL cartridge and manual filling.)	1.60	25
853920	KH-120	250	0.55	36.1	140 (85 mL cartridge)	0.60	20
853923	KH-35	319	1.23	60.5	400 (210 mL cartridge)	1.00	25
853935	KH-32	393	1.44	60.5	200 (dedicated to manual filling)	1.00	25
853926	CH-400	397	1.68	60.5	400 (dedicated to 420 mL cartridge)	0.93	50
853926	CH-400G	397	1.68	60.5	400 (with 420 mL cartridge dedicated grease)	0.93	50
854284	CH-650LL	401	1.69	60.5	400(Combined to 420mL cartridge and manual filling.)	0.93	80

The KH and CH Series comes standard with the HSP-1 straight nozzle.(CH-650LL and GC-57K come standard with the CNP-2 chuck nozzle.)

In the above specifications table, the overall length and weight do not include the nozzle. The displayed pressures indicate the maximum pressures; the nozzle values assume the use of the CNP-2 chuck nozzle.

## 4. Preparation for Use

### 4-1 Preparation

Attach the accessory nozzle or a separately purchased hose or nozzle to the grease gun by screwing onto the grease outlet (Rp1/8). Fill the grease gun with grease according to the filling procedure for the model in use.

### 4-2 Greasing

Wipe clean the grease fitting and the tip of the nozzle, connect the nozzle, then reciprocate the lever. If grease is charged normally, old grease is pushed out from the groove or clearance near the fitting. For the amount of grease to charge, refer to the instruction manual for the target machine, or charge the machine with new grease until old grease is completely pushed out. Note, however, that old grease does not come out depending on the greasing point.

### 4-3 Maintenance

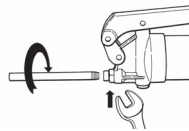
Although the grease gun does not require special routine maintenance check, be careful not to introduce foreign material into grease. As the fitting at the lubrication inlet gathers dirt and sand, keep it clean along with the grease gun. Check the fitting if you need a strong force to move the lever.

### 4-4 Tip

Grease may not come out easily when you use the grease gun for the first time. In that case, be sure to fully open or close the lever. Note that operating the lever halfway through the stroke cannot draw grease in the grease cylinder.

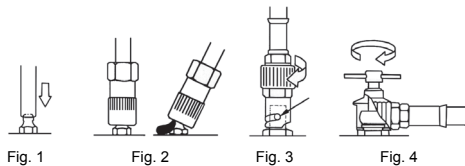
### 4-5 Replacing the nozzle

When removing the accessory nozzle or replacing it with a separately purchased hose or nozzle, hold the nozzle bracket (on the grease gun) with a wrench, remove the nozzle, then attach a new nozzle.

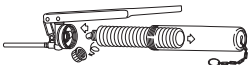

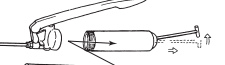


### 4-6 Connecting the nozzle to the fitting

- |        |                 |                    |   |
|--------|-----------------|--------------------|---|
| Fig. 1 | standard nozzle | hydraulic fittings | Grease while pressing the tip of the nozzle vertically  |
| Fig. 2 | chuck nozzle    | hydraulic fittings | Push the nozzle vertically onto the fitting until it grips the fitting, then start greasing. Before removing the nozzle from the fitting after greasing, lean the nozzle from the fitting |
| Fig. 3 | for pin-type    | pin-type fitting   | Push the nozzle vertically onto the fitting until it grips the fitting completely up to the pin along the cut   |
| Fig. 4 | for buttonhead  | buttonhead fitting | Insert the chuck at the end of the hose to the fitting from the side, tighten the screw on top, then start greasing.  |



## 5. How to Use

Manually filled type		
Cartridge-acceptable type	Manually filled type	GC-57K(For cartridge)
 <ol style="list-style-type: none"> <li>Remove the grease cylinder by screwing it back from the main body.</li> <li>Pull the chain to lock it to the groove at the bottom of the grease cylinder.</li> <li>Remove the cap from the grease cartridge (specified mL), then screw the cartridge into the main body.</li> </ol> <p>* If you do not use a grease cartridge, directly fill the grease cylinder with grease. At this time, be careful not to let air or dirt in grease.</p> <ol style="list-style-type: none"> <li>Attach the grease cylinder to the main body.</li> <li>Unlock the chain and put it into the grease cylinder.</li> <li>Reciprocate the lever two or more times and make sure that grease comes out from the tip of the nozzle.</li> </ol> <p>* If you directly fill the grease cylinder with grease, grease may not come out soon even after you operate the lever. As this is caused by an air pocket in grease, loosen the grease cylinder once or twice to degas it. For manual filling, use grease not exceeding the specified amount.</p>	 <ol style="list-style-type: none"> <li>Remove the grease cylinder by screwing it back from the main body.</li> <li>Pull the handle to lock it to the cut slot at the constriction on the grease cylinder.</li> <li>Use a spatula to take a small amount of grease (specified mL), then fill the grease cylinder from its edge. At this time, take meticulous care not to let dirt, sand, or air in grease. When the grease cylinder is filled, tap it once or twice to degas and fix grease.</li> </ol> <ol style="list-style-type: none"> <li>Pull the handle fully, then attach the grease cylinder to the main body.</li> <li>Taking the above steps completes filling the grease cylinder. Add grease as required in the same way.</li> <li>When using the grease gun, remove the handle from the cut slot and put it back. Grease will be pressurized by the spring.</li> </ol> <p>* Grease may not come out soon even after you operate the lever. As this is caused by an air pocket in grease, loosen the grease cylinder once or twice to degas it. For manual filling, use grease not exceeding the specified amount.</p>	 <ol style="list-style-type: none"> <li>Remove the grease cylinder by screwing it back from the main body.</li> <li>Pull the handle to lock it to the cut slot at the constriction on the grease cylinder.</li> <li>Remove the caps from both sides of the grease cartridge. Insert the grease cartridge to the grease cylinder from the wide-mouth side first(indicated by an arrow).</li> <li>Unlock the handle and put it into the grease cylinder.</li> <li>Taking the above steps completes filling the grease cylinder. Add grease as required in the same way.</li> <li>Grease may not come out even though grease is still inside. As this is caused by an air pocket in grease, degas it by moving the rod back and forth.</li> </ol>

## 6. Genuine option nozzle

Applicable to any lever-type grease gun.

Classification	Product No.	Model	Overall Length (mm)	Weight (g)	Application
"MICROHOSE" Normal operation pressure: 21 MPa	850664	SPK-1C	355	141	For pin-type fitting
	850665	SPK-2C	375	180	For buttonhead fitting
	850666	SPK-3C	330	83	For hydraulic fitting
	850478	SPK-1C/1M	1069	189	For pin-type fitting
	850489	SPK-2C/1M	1070	242	For buttonhead fitting
	850490	SPK-3C/1M	7030	132	For hydraulic fitting
	850392	SPK-5	414	300	For hydraulic fitting
	850381	SPK-20C	377	320	For buttonhead fitting
	851268	SPK-700E	691	510	For hydraulic fitting