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BLOCCHI AGGIUNTIVI E ACCESSORI PER SERIE GM **ADD-ON BLOCKS AND ACCESSORIES FOR GM SERIES** **ANAUBLÖCKE UND ZUBERHÖR FÜR SERIE GM** **BLOCKS ADDITIIS EL ACCESSORIES POUR SERIE GM** **BLOQUES ADICIONALES Y ACCESSORIOS PARA SERIE GM** **GMX61NFPA, GMX3..., GMXCL...**

WARNING!

- This equipment is to be installed by qualified personnel, complying to current standards, to avoid damages or safety hazards.
- The manufacturer cannot be held responsible for electrical safety in case of improper use of the equipment.
- Products illustrated herein are subject to alteration and changes without prior notice. Technical data and descriptions in the documentation are accurate, to the best of our knowledge, but no liabilities for errors, omissions or contingencies arising there from are accepted.

ATTENTION !

- Ces appareils doivent être installés par un personnel qualifié, conformément aux normes en vigueur en matière d'installations, afin d'éviter de causer des dommages à des personnes ou choses.
- Le constructeur n'assume aucune responsabilité quant à la sécurité électrique en cas d'utilisation impropre du dispositif.
- Les produits décrits dans ce document sont susceptibles d'évoluer ou de subir des modifications à n'importe quel moment. Les descriptions et caractéristiques techniques du catalogue ne peuvent donc avoir aucune valeur contractuelle.

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- Zur Vermeidung von Personen- und Sachschäden dürfen diese Geräte nur von qualifiziertem Fachpersonal und unter Befolgung der einschlägigen Vorschriften installiert werden.
- Bei zweckwidrigem Gebrauch der Vorrichtung übernimmt der Hersteller keine Haftung für die elektrische Sicherheit.
- Die in dieser Broschüre beschriebenen Produkte können jederzeit weiterentwickelt und geändert werden. Die im Katalog enthaltenen Beschreibungen und Daten sind daher unverbindlich und ohne Gewähr.

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- Este dispositivo debe ser instalado por personal cualificado conforme a la normativa de instalación vigente a fin de evitar daños personales o materiales.
- El fabricante no se responsabilizará de la seguridad eléctrica en caso de que el dispositivo no se utilice de forma adecuada.
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- Tato zařízení smí instalovat kvalifikovaní pracovníci v souladu s platnými předpisy a normami pro předcházení úrazů osob či poškození věcí.
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ATTENZIONE!

- Questi apparecchi devono essere installati da personale qualificato, nel rispetto delle vigenti normative impiantistiche, allo scopo di evitare danni a persone o cose.
- Il costruttore non si assume responsabilità in merito alla sicurezza elettrica in caso di utilizzo improprio del dispositivo.
- I prodotti descritti in questo documento sono suscettibili in qualsiasi momento di evoluzioni o di modifiche. Le descrizioni ed i dati a catalogo non possono pertanto avere alcun valore contrattuale.

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- 制造商不负责因设备使用不当导致的电气安全问题。
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DIKKAT!

- Bu aparatlar kişilere veya nesnelere zarar verme ihtimaline karşı yürürlükte olan sistem kurma normlarına göre kalifiye personel tarafından monte edilmelidir.
- Üretici aparatın hatalı kullanımından kaynaklanan elektrisel güvenliği akl sorumluluk kabul etmez.
- Bu dokümanda tarif edilen ürünler her an evrimlere veya değişimlere açıktır. Bu sebeple katalogdaki tarif ve değerler herhangi bir bağlayıcı değeri haiz değildir.

Installation and Operating Instructions

Flange Operated Disconnect Switches

30-200 A fused GMF series switches

These instructions cover the installation and adjustment of flange handle operated disconnect switches.

Handles and mechanisms are UL Recognized, disconnect switches are UL Listed.
UL file #E328470.

Overview of Function

The disconnect switch is operated ON and OFF by means of an enclosure mounted flange handle. A flexible push-pull cable connects the handle to the switch, transferring the vertical motion of the handle to the rotary motion required to operate the switch.

Features

- Padlockable in OFF position
- Provides door interlock in ON position
- Meets NFPA79 requirements

The following components are required for a complete flange operated switch assembly:

1. Flange Mechanism Kit GMX3_
2. Flange Handle GMX61NFPA
3. Flexible Cable GMXCL_
4. Disconnect Switch GMF_
5. Switch Lug Kit (optional)

1. Flange Mechanism Kits

- GMX30 for use with GMFJ030C12, GMFC030C12
- GMX31 for use with GMFJ060C12
- GMX32 for use with GMFJ060C03, GMFJ100C03, GMFJ200C03

2. Flange Handles

GMX61NFPA UL Type 1, 3R, 4, 4X & 12

3. Flexible Cable (length)

- GMXCL36
- GMXCL48
- GMXCL60
- GMXCL72

4. Disconnect Switches

3 pole, fused

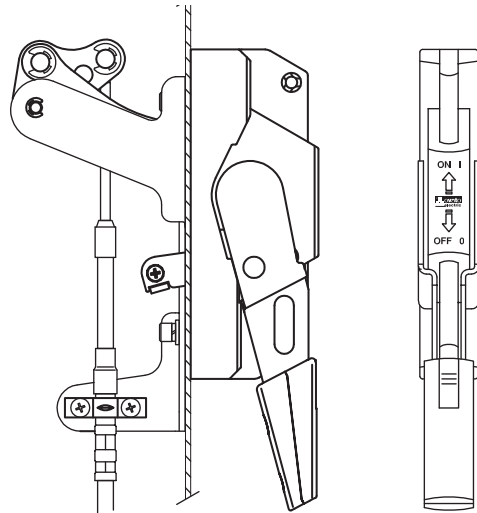
- GMFJ030C12 30A class J fuse
- GMFC030C12 30A class CC fuse
- GMFJ060C12 60A class J fuse
- GMFJ060C03 60A class J fuse
- GMFJ100C03 100A class J fuse
- GMFJ200C03 200A class J fuse

5. Switch Terminal Lug Kits

- GMFJ200C03 switches require optional terminal lug kits, p/n: GMX501.
- All other switches have integral lugs.

Required tools for installation:

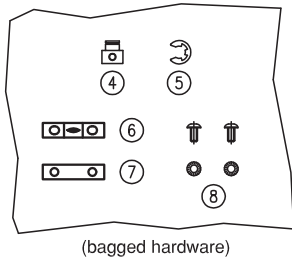
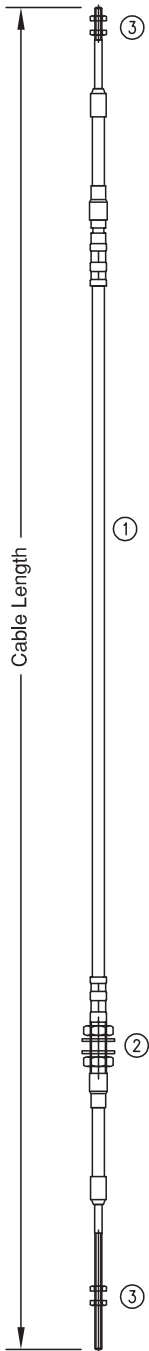
- #2 Phillips head screwdriver
- 3/16" Allen hex wrench
- (2) 5/16" open end wrenches
- (2) 11/16" open end wrenches
- Standard socket wrench set
- 7/16" socket
- Pliers
- Drill and tap for 1/4-20 hardware



Warning:

This equipment should be installed only by qualified personnel in accordance with accepted safety practices.

Flexible Cable

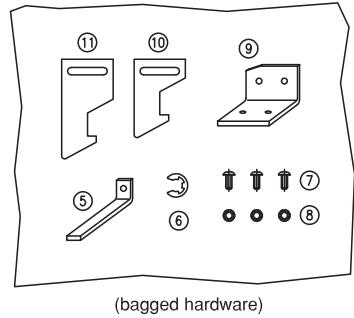
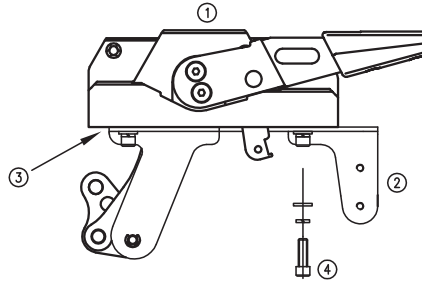


Flexible Cables

Cables are furnished with the components illustrated:

1. Cable
2. Cable Housing Nuts / Washers
3. (4) #10-32 hex nuts (installed on cable ends)
4. Cable Bearing
5. "E" retaining ring (for item 4)
6. Cable Clamp
7. Cable Clamp Shim Plate
8. Cable Clamp hardware
 - (2) "10 32x3/8 Pan hd schew
 - (2) #10 lock washer

Flange Handle



Flange Handle

Handles are furnished partially assembled with the components illustrated:

1. Flange Handle
2. Handle Bracket
3. Door gasket (not shown)
4. Mounting hardware
 - (2) 1/4-20x3/4" socket hd gap screw
 - (2) 1/4" split lockwasher
 - (2) 1/4" flat washer

Additional components and hardware provided in separate plastic bag:

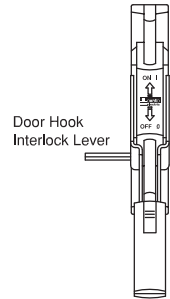
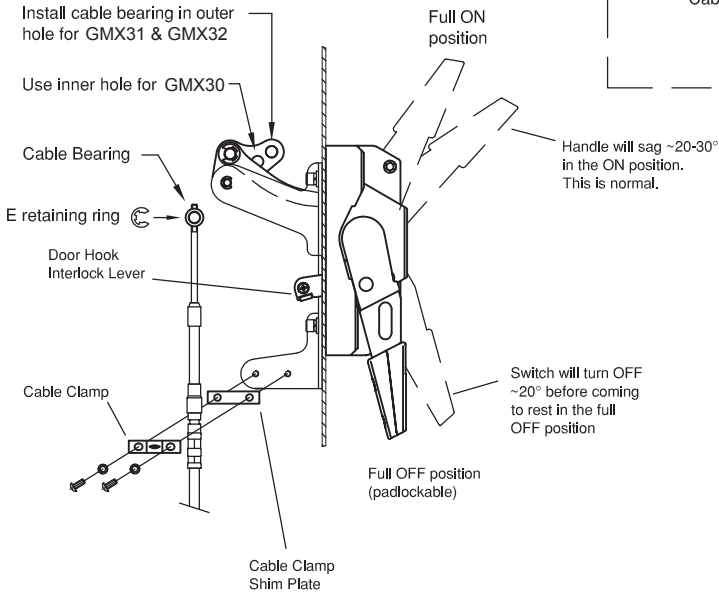
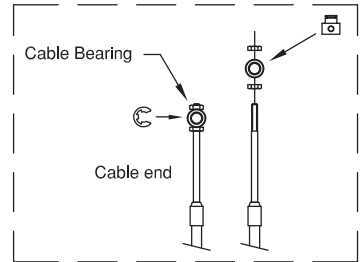
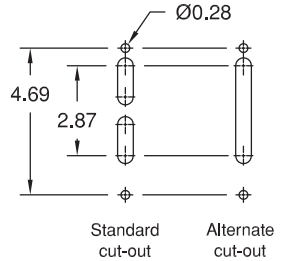
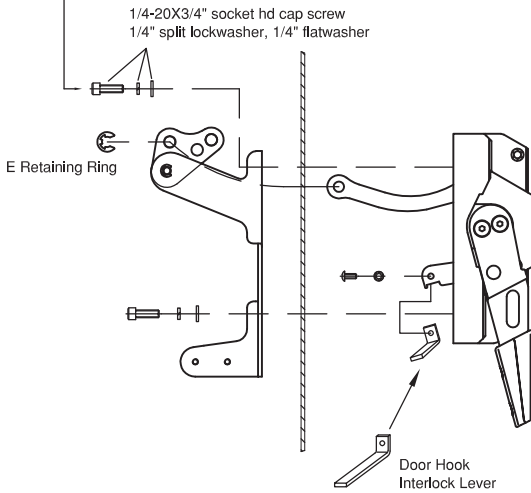
5. Door Hook Interlock Lever
6. "E" Retaining Ring
7. (3) #8-32x3/8" Phillips hd screw
8. (3) #8 lockwasher
9. Door Hook Weld Bracket
10. Door Hook, Short
11. Door Hook, Long

Items 9, 10 and 11 may not be needed if the enclosure used is already equipped with a door hook or hook mounting bracket.

Item 9 intended to be spot welded to the rear surface of the enclosure door and serve as a mounting base for the door hook.

Flange Handle Assembly

Tool required: 3/16" allen hex wrench
Torque: 72 lb.in.



Flange Handle Door Interlock

The flange handle is equipped with a door interlock feature, preventing the enclosure door from being opened if the handle is not in the full OFF position. Also, the handle includes an interlock defeat mechanism, allowing access to the enclosure with the use of a tool when the handle is in the ON position.

During installation, the proper function of the door interlock feature must be adjusted and verified. This is achieved by alignment of the door hook with the interlock lever and may require adjustment of the position of the hook and/or slight bending of the interlock lever.

The specific enclosure used may already be equipped with the door hook.

Operation

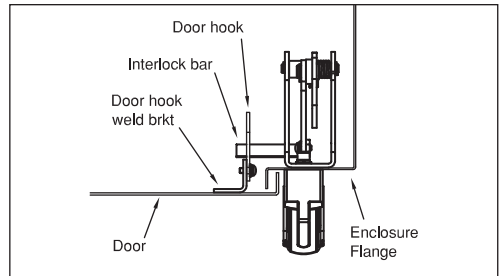
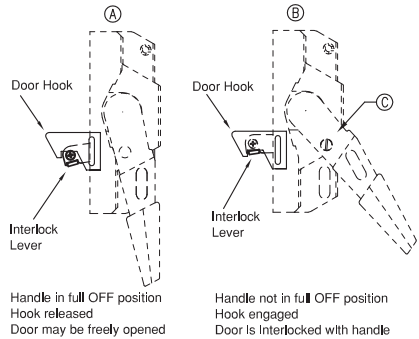
The **HANDLE INTERLOCK LEVER** rises when the handle is moved away from the full OFF position, engaging the **DOOR HOOK** and preventing the door from being opened.

The **DOOR HOOKS** (long and short) are included with the handle, along with a **HOOK MOUNTING BRACKET**, in the event that the actual enclosure used does not include a door hook. The mounting bracket is designed to be spot welded to the inside surface of the door, but may be drilled and screwed to the door if desired.

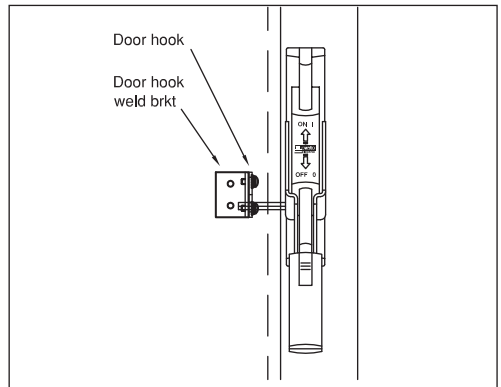
A. Interlock bar moves downward when the handle is moved to the full OFF position, disengaging the door hook and allowing the door to be freely opened.

B. If the handle is raised, the interlock bar moves upwards and engages the door hook. The enclosure door is now interlocked to the handle and cannot be opened.

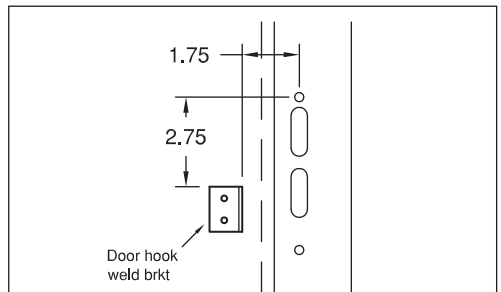
C. The interlock defeat mechanism can be operated using a tool (flat blade screwdriver) to release the door hook and allow the door to be opened, even if the handle is ON.



Top view (looking down from above)



Front view

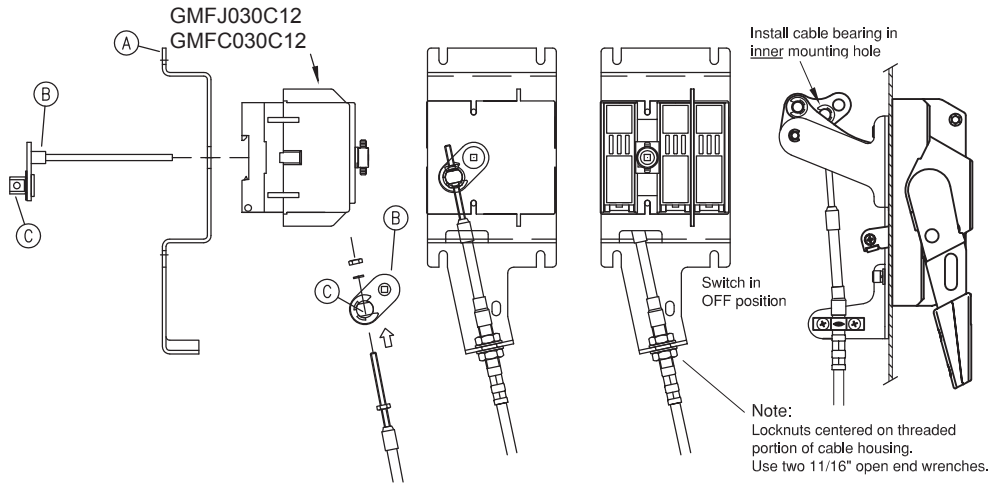


Front view DOOR HOOK BRACKET location

GMX30

Flange Operated Switch Mechanism Kit

for use with switches GMFJ030C12 & GMFC030C12



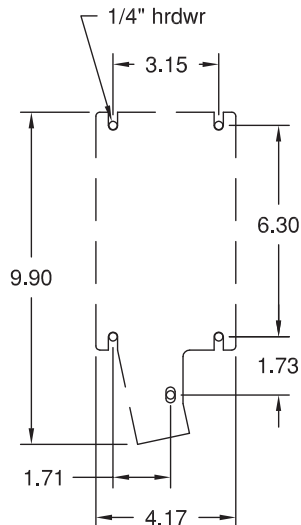
Assembly Procedure

Before installing switch, install handle and cable together in the enclosure flange cut-out. See pages 4 & 5 of this document for assembly and installation instructions. **Place handle in full OFF position before proceeding with switch installation.**

1. Install **GMFJ030C12** or **GMFC030C12** switch on **GMX30 BASE PLATE** (A) using the included hardware.
2. Install the **OPERATING LEVER** (8) into the switch rotary mechanism from underneath the **BASE PLATE**. Fully insert the operating lever and orient as shown above. Tightening the two set screws at the top of the switch using a small flat blade screwdriver to retain the **OPERATING LEVER**. Torque: 9 lb.in.
3. Install the free end of the cable into the **PIVOT POST** (C) and install the cable housing into the open slot on the **BASE PLATE**, tighten the two lock nuts on the cable housing. Note: the two lock nuts should be centered on the threaded portion of the cable housing to allow for later adjustment.

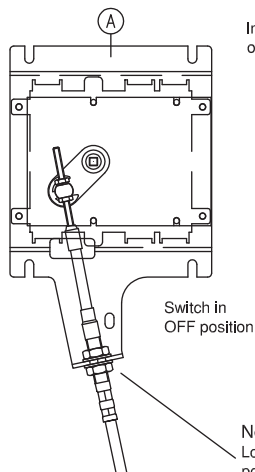
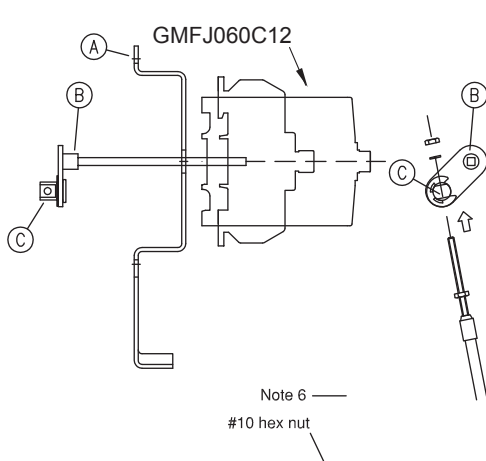
4. Install the cable hardware as shown above and tighten onto the **PIVOT POST**. Make certain that both the flange handle and the switch are in the full OFF position.

5. Operate the switch ON and OFF several times. If adjustment is required, loosen the two lock nuts on the cable housing and adjust their positions to alter the cable travel. Use two 11/16" open end wrenches to adjust and tighten the lock nuts.

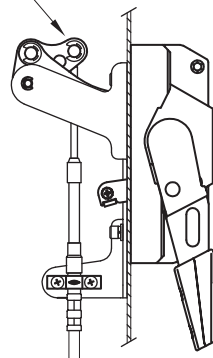


GMX31

Flange Operated Switch Mechanism Kit for use with switches GMFJ060C12



Install cable bearing in
outer mounting hole



Note:
Locknuts centered on threaded
portion of cable housing.
Use two 11/16" open end wrenches.

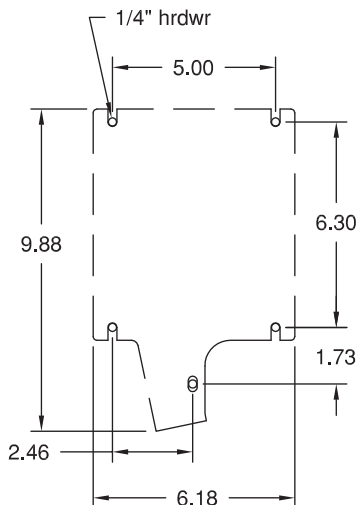
Assembly Procedure

Before installing switch, install handle and cable together in the enclosure flange cut-out. See pages 4 & 5 of this document for assembly and installation instructions. **Place handle in full OFF position before proceeding with switch installation.**

1. Install **GMFJ060C12** switch on **GMX31 BASE PLATE** (A) using the included hardware.
2. Install the **OPERATING LEVER** (8) into the switch rotary mechanism from underneath the **BASE PLATE**. Fully insert the operating lever and orient as shown above. Tightening the two set screws at the top of the switch using a small flat blade screwdriver to retain the **OPERATING LEVER**. Torque: 9 lb.in.
3. Install the free end of the cable into the **PIVOT POST** (C) and install the cable housing into the open slot on the **BASE PLATE**, tighten the two lock nuts on the cable housing. Note: the two lock nuts should be centered on the threaded portion of the cable housing to allow for later adjustment.

4. Install the cable hardware as shown above and tighten onto the **PIVOT POST**. Make certain that both the flange handle and the switch are in the full OFF position.

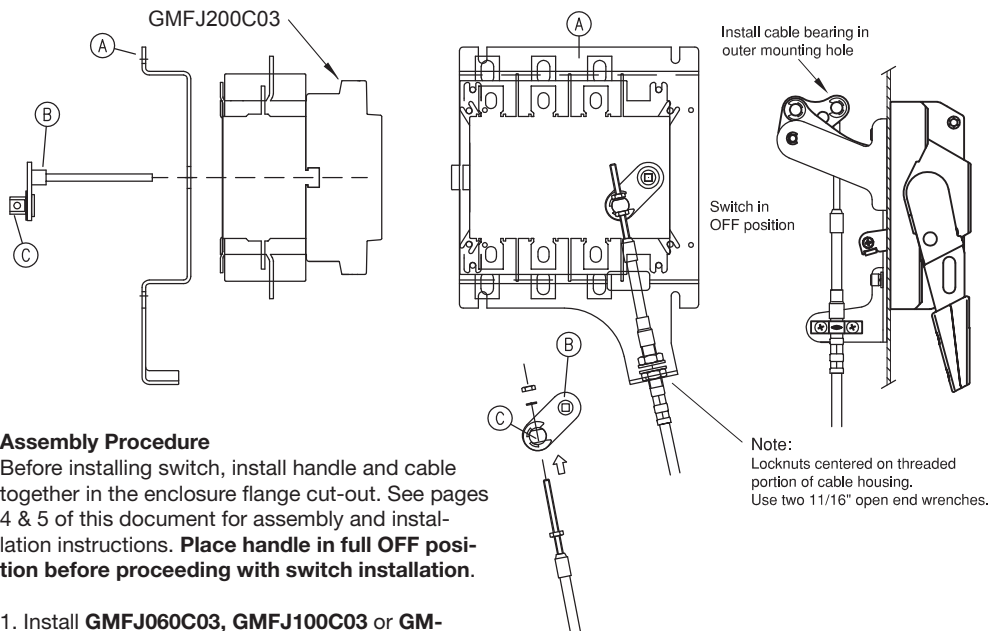
5. Operate the switch ON and OFF several times. If adjustment is required, loosen the two lock nuts on the cable housing and adjust their positions to alter the cable travel. Use two 11/16" open end wrenches to adjust and tighten the lock nuts.



GMX32

Flange Operated Switch Mechanism Kit

for use with switches GMFJ060C03, GMFJ100C03, GMFJ200C03



Assembly Procedure

Before installing switch, install handle and cable together in the enclosure flange cut-out. See pages 4 & 5 of this document for assembly and installation instructions. **Place handle in full OFF position before proceeding with switch installation.**

1. Install **GMFJ060C03, GMFJ100C03 or GMFJ200C03** switch **UPSIDE DOWN** on **GMX32 BASE PLATE (A)** using the included hardware.
2. Install the **OPERATING LEVER (8)** into the switch rotary mechanism from underneath the **BASE PLATE**. Fully insert the operating lever and orient as shown above. Tightening the two set screws at the top of the switch using a small flat blade screwdriver to retain the **OPERATING LEVER**. Torque: 9 lb.in.
3. Install the free end of the cable into the **PIVOT POST (C)** and install the cable housing into the open slot on the **BASE PLATE**, tighten the two lock nuts on the cable housing. Note: the two lock nuts should be centered on the threaded portion of the cable housing to allow for later adjustment.
4. Install the cable hardware as shown above and tighten onto the **PIVOT POST**. Make certain that both the flange handle and the switch are in the full **OFF** position.
5. Operate the switch **ON** and **OFF** several times. If adjustment is required, loosen the two lock nuts on the cable housing and adjust their positions to alter the cable travel. Use two 11/16" open end wrenches to adjust and tighten the lock nuts.

