

# Life Fitness Cable Motion Universal Cable

LCM-UC

ASSEMBLY INSTRUCTIONS





## Corporate Headquarters

Columbia Centre III, 9525 Bryn Mawr Avenue, Rosemont, IL 60018 • U.S.A.  
847.288.3300 • FAX: 847.288.3703  
Service phone number: 800.351.3737 (toll-free within U.S.A., Canada)  
Global Website: [www.lifefitness.com](http://www.lifefitness.com)

### International Offices

#### AMERICAS

##### North America

###### Life Fitness, LLC

Columbia Centre III  
9525 Bryn Mawr Avenue  
Rosemont, IL 60018 U.S.A.  
Telephone: (847) 288 3300  
Service Email:  
[customersupport@lifefitness.com](mailto:customersupport@lifefitness.com)  
Sales/Marketing Email:  
[commercialsales@lifefitness.com](mailto:commercialsales@lifefitness.com)

##### Brazil

###### Life Fitness Brasil

Av. Rebouças, 2315  
Pinheiros  
São Paulo, SP 05401-300  
BRAZIL  
SAC: 0800 773 8282 option 2  
Telephone: +55 (11) 3095 5200 option 2  
Service Email: [suportebr@lifefitness.com](mailto:suportebr@lifefitness.com)  
Sales/Marketing Email:  
[vendasbr@lifefitness.com](mailto:vendasbr@lifefitness.com)

##### Latin America and Caribbean\*

###### Life Fitness, LLC

Columbia Centre III  
9525 Bryn Mawr Avenue  
Rosemont, IL 60018 U.S.A.  
Telephone: (847) 288 3300  
Service Email:  
[customersupport@lifefitness.com](mailto:customersupport@lifefitness.com)  
Sales/Marketing Email:  
[commercialsales@lifefitness.com](mailto:commercialsales@lifefitness.com)

#### EUROPE, MIDDLE EAST, and AFRICA (EMEA)

##### Belgium, Netherlands, and Luxemburg

###### Life Fitness (Atlantic) B.V.

Fascinatio Boulevard 230, 4<sup>th</sup> Fl - Bldg B  
3065WB, Rotterdam  
The Netherlands  
+31 88 646 6666  
Service Email:  
[service.benelux@lifefitness.com](mailto:service.benelux@lifefitness.com)  
Sales/Marketing Email:  
[marketing.benelux@lifefitness.com](mailto:marketing.benelux@lifefitness.com)

##### United Kingdom

###### Life Fitness UK LTD

Unit 109<sup>a</sup>  
Lancaster Way Business Park  
Ely, Cambs, CB6 3NX  
Telephone: General Office (+44)  
1353.666017  
Customer Support (+44) 1353.665507  
Service Email: [uk.support@lifefitness.com](mailto:uk.support@lifefitness.com)  
Sales/Marketing Email: [life@lifefitness.com](mailto:life@lifefitness.com)

##### Germany, Austria, and Switzerland

###### Life Fitness Europe GMBH

Neuhofweg 9  
85716 Unterschleißheim  
GERMANY  
Telephone:  
+49 (0) 89 / 31775166 Germany  
+43 (0) 1 / 6157198 Austria  
+41 (0) 848 / 000901 Switzerland  
Service Email:  
[kundendienst@lifefitness.com](mailto:kundendienst@lifefitness.com)  
Sales/Marketing Email:  
[vertrieb@lifefitness.com](mailto:vertrieb@lifefitness.com)

##### Spain

###### Life Fitness IBERIA

C/Frederic Mompou 5,1<sup>o</sup><sup>a</sup>  
08960 Sant Just Desvern Barcelona  
SPAIN  
Telephone: (+34) 93.672.4660  
Service Email:  
[servicio.tecnico@lifefitness.com](mailto:servicio.tecnico@lifefitness.com)  
Sales/Marketing Email:  
[info.iberia@lifefitness.com](mailto:info.iberia@lifefitness.com)

#### All Other EMEA Countries and Distributor Business EMEA\*

###### Life Fitness (Atlantic) B.V.

Fascinatio Boulevard 230, 4<sup>th</sup> Fl - Bldg B  
3065WB, Rotterdam  
The Netherlands  
+31 88 646 6666  
Service Email:  
[emeaservicesupport@lifefitness.com](mailto:emeaservicesupport@lifefitness.com)

#### ASIA PACIFIC (AP)

##### Japan

###### Life Fitness Japan, Ltd

4-17-33 Minami Aoyama 1F/B1F  
Minato-ku - Tokyo 107-0062  
Japan  
Telephone: (+81) 0120.114.482  
Fax: (+81) 03-5770-5059  
Service Email: [service.lfj@lifefitness.com](mailto:service.lfj@lifefitness.com)  
Sales/Marketing Email:  
[sales@lifefitnessjapan.com](mailto:sales@lifefitnessjapan.com)

##### Hong Kong

###### Life Fitness Asia Pacific LTD

26/F, Global Trade Square  
21 Wong Chuk Hang Road  
Wong Chuk Hang  
Hong Kong  
Telephone: (+852) 25756262  
Fax: (+852) 25756894  
Service Email: [service.hk@lifefitness.com](mailto:service.hk@lifefitness.com)  
Sales/Marketing Email:  
[marketing.hk.asia@lifefitness.com](mailto:marketing.hk.asia@lifefitness.com)

#### All Other Asia Pacific countries and distributor business Asia Pacific\*

###### Life Fitness Asia Pacific LTD

26/F, Global Trade Square  
21 Wong Chuk Hang Road  
Wong Chuk Hang  
Hong Kong  
Telephone: (+852) 25756262  
Fax: (+852) 25756894  
Service Email: [service.ap@lifefitness.com](mailto:service.ap@lifefitness.com)  
Sales/Marketing Email:  
[marketing.hk.asia@lifefitness.com](mailto:marketing.hk.asia@lifefitness.com)

\*Also check [www.lifefitness.com](http://www.lifefitness.com) for local representation or distributor/dealer

## User and Service Documents Link

---

<https://fn.fit/KnowledgeBase>

<https://fn.fit/PartStore>

Additional information is available online using the links above.

تتوفر معلومات إضافية على الإنترنت باستخدام الرابط أعلاه.

点击上面的链接可在线获取更多信息。

Flere oplysninger er tilgængelige online gennem linket ovenfor.

Bijkomende informatie is online beschikbaar via bovenstaande link.

Vous trouverez plus d'informations en ligne à l'aide du lien ci-dessus.

Zusätzliche Informationen finden Sie online über den oben angegebenen Link.

Ulteriori informazioni sono disponibili online utilizzando il link sopra riportato.

追加情報は上記リンクを使用してオンラインで利用可能です。

상기 링크를 통해 온라인에서 추가 정보를 볼 수 있습니다.

Informações adicionais estão disponíveis on-line, através do link acima.

Дополнительная информация доступна в интернете по ссылке, указанной выше.

Mediante el enlace anterior podrá acceder a información adicional en línea.

Ytterligare information finns online genom att använda länken ovan.

İnternet üzerinden daha fazla bilgi edinmek için yukarıdaki bağlantıyı kullanabilirsiniz.

هناك معلومات إضافية متاحة على الإنترنت باستخدام الرابط أعلاه.

Informazio osagarria eskuragarri dago goiko estekaren bidez.

Допълнителна информация можете да намерите онлайн, като използвате връзката по-горе.

Mitjançant l'enllaç anterior podreu accedir a informació addicional en línia.

使用上面的連結線上提供額外資訊。

Dodatne informacije možete pronaći na internetu sljedeći vezu iznad.

ከላይ የተመጠውን አገናኝ(ሊንክ) በመጠቀም መረጃዎች አንላይን ያገኛሉ።

Lisätietoja on saatavissa verkosta käyttämällä yllä olevaa linkkiä.

Wubetumi anya nsem afoforo aka ho wa websait so denam asem a ewo atifi ho a wubemia so so.

Πρόσθετες πληροφορίες είναι διαθέσιμες online χρησιμοποιώντας το σύνδεσμο παραπάνω.

מידע נוסף אפשר לקבל באינטרנט באמצעות הקישור לעיל.

További információ elérhető online, a fenti hivatkozás segítségével.

Viðbótarupplýsingar eru fáanlegar á netinu með því að smella á tengilinn hér fyrir ofan.

Plus indicium per superum situm potes invenire.

മുകളിലുള്ള ലിങ്ക് ഉപയോഗിച്ച് ഓൺലൈനിൽ കൂടുതൽ വിവരങ്ങൾ ലഭ്യമാണ്.

Ytterligere informasjon er tilgjengelig på nettet via linken ovenfor.

Dodatkowe informacje są dostępne online pod powyższym odnośnikiem.

Informações adicionais estão disponíveis online a usar o link acima.

Informații suplimentare sunt disponibile online, utilizând link-ul de mai sus.

Dodatne informacije dostupne su na mreži putem gornjeg linka.

Ďalšie informácie sú dostupné online na vyššie uvedenom odkaze.

# Table of Contents

## Safety

Safety Information.....	6
Strength Training with Mobility Device Guidelines.....	8
Product Labels.....	9

## Specifications

Universal Cable (LCM-UC).....	12
-------------------------------	----

## Maintenance Procedures

Maintenance Schedule.....	13
---------------------------	----

## Assembly

Tools Required.....	16
Components.....	16
Assembly Order.....	17
Remove Workarms (optional).....	18
Foot Brace Assembly.....	20
Weight Stack Assembly (from front).....	21
Weight Stack Assembly (from rear).....	27
Level Unit.....	32
Cable Installation.....	33
Pull Pin Replacement.....	37
Release Handle Replacement.....	40

## Cable Handling Guide

Cable Terminations, Tensioning and Wear Guide.....	41
Cable Terminations.....	41
Tensioning Cable.....	42
Strength Cable Wear Guide.....	43
Insert Inspection.....	44

## Bolt to Floor Guide

Introduction.....	45
Delivery and Installation Tips.....	45
Anchor Type - Static.....	45
Anchor Specifications.....	46
Pullout Force.....	46
Tools Required.....	46
Static Anchor Procedure.....	47
Foot Dimensions.....	48

# 1. Safety

## Safety Information

It is the sole responsibility of the purchaser of Life Fitness products to read the owner's manual and warning labels and instruct all individuals, whether they are the end user or supervising personnel, on proper usage of the equipment.

UNDERSTANDING EACH AND EVERY WARNING TO THE FULLEST IS IMPORTANT. IF ANY OF THESE WARNINGS ARE UNCLEAR, CONTACT Life Fitness CUSTOMER SERVICE IMMEDIATELY AT 1-800-351-3737.

This equipment is categorized as class S per EN ISO 20957-1. As such this equipment is only intended for commercial, institutional and/or studio facilities. It is not intended for home use. Contact Life Fitness with any questions regarding this classification.

It is recommended that all users of Life Fitness exercise equipment be informed of the following information prior to use.

### Operating Warnings

**⚠ WARNING:** This product can expose you to chemicals including 1,3 Butadiene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <http://www.P65Warnings.ca.gov>

- Life Fitness does not warrant nor guarantee that component parts used in the manufacture of products offered under the Life Fitness brand are latex-free. Users of these products must take all necessary precautions to prevent accidental contact that could lead to an adverse latex reaction.
- It is the purchaser's sole responsibility to properly instruct its end users and supervising personnel as to the proper operating procedures of all equipment.
- This equipment is not intended for use by children. Keep children under the age of 14 away from the machine.
- Do not allow users to wear loose fitting clothing or jewelry while using equipment. It is also recommended to have users secure long hair back and up to avoid contact with moving parts.
- All bystanders must stay clear of all users, moving parts and attached accessories and components while machine is in operation.

### Access Control

- Life Fitness recommends that all commercial fitness equipment be used in a supervised area. It is recommended that the equipment be located in an access controlled area. Control is the responsibility of the facility owner.

### Installation

- Life Fitness recommends that all equipment be secured to a solid, level surface to stabilize it and eliminate rocking or tipping over. This must be performed by a licensed contractor. See [Bolt to Floor Guide](#) for installation procedure.

### Proper Usage

- Do not use any equipment in any way other than as designed or intended by the manufacturer. It is imperative that Life Fitness equipment is used properly to avoid injury.
- Injuries may result if exercising improperly or excessively. It is recommended that all individuals consult a physician prior to commencing an exercise program. If at any time during exercise you feel faint, dizzy or experience pain, STOP EXERCISING and consult your physician.
- Keep body parts (hands, feet, hair, etc.), clothing and jewelry away from moving parts to avoid injury.
- When adjusting any seat, knee hold down pad, range of motion limiter, foothold pad, pulley or any other type of adjuster, make certain that the adjusting pin is fully engaged in the hole to avoid injury.

### Inspection

- DO NOT attempt to use or repair any accessory approved for use with the equipment which appears to be damaged or worn.
- DO NOT use or permit use of any equipment that is damaged and/or has worn or broken parts. For all Life Fitness equipment, use only replacement parts supplied by Life Fitness.
- Cables and belts pose an extreme liability if used when damaged. Always replace any cable at first sign of wear (consult Life Fitness if uncertain).
- Maintain labels, name plates and instructional placards. Do not remove labels or instructional placards for any reason. They contain important information. Contact Customer Support to replace any worn, damaged, or unreadable labels or instructional placards and to ensure that you are always using the latest version of labels and instructional placards.

- Equipment Maintenance - Preventative maintenance is the key to smooth operating equipment as well as to keep your liability to a minimum. Equipment needs to be inspected at regular intervals.
- Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so. Life Fitness will provide service and maintenance training at our corporate facility upon request or in the field if proper arrangements are made.
- Before use, examine all accessories approved for use with the Life Fitness equipment for damage or wear.

### **SelectORIZED**

- Use only weight selector pins supplied by seller on weight stacks. Substitutes are forbidden.
- Fully insert weight selector pins. Partial insertion can cause weights to fall unexpectedly.
- Never pin the weight stack in an elevated position.
- Never remove selector pin if any weights are suspended.
- Never attempt to release jammed weights or parts.
- Never use dumbbells, weight plates or any means, beyond the product itself, to incrementally increase the weight resistance.





### **Warnings and Cautions**

- Warning labels indicate a potentially hazardous situation that could result in serious injury or death if the precautions are not observed.
- Caution labels indicate a potentially hazardous situation that could result in serious injury or damage to machine if the precautions are not observed.
- Contact [Customer Support Services](#) to replace any worn, damaged, or unreadable labels and to ensure that you are always using the latest version of labels.





# Strength Training with Mobility Device Guidelines

Guidelines for use of fitness equipment for persons using mobility devices.

## INCORRECT USE OF FITNESS EQUIPMENT

Rearward Instability	Rearward Instability	Lateral Instability	Forward Instability
Any forward, upward, or downward pushing may cause rearward tipping.	Free weights lifted above and behind the head may cause rearward tipping.	Too much weight on one side may cause lateral tipping.	Rotating front casters backwards may cause forward tipping.
			

## CORRECT USE OF FITNESS EQUIPMENT

Rearward Stability	Rearward Stability	Lateral Stability	Forward Stability
The aid of a spotter may prevent rearward tipping.	A wheel chock and weight on foot plate may prevent rearward tipping.	Leaning to the opposite side of the weight may prevent lateral tipping.	Rotating front casters forward may prevent forward tipping.
			

## Product Labels

Installers to verify that all labels are accounted for. Replace any labels that are missing or damaged.

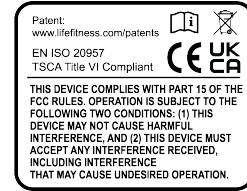
### General Warning

**⚠ WARNING**

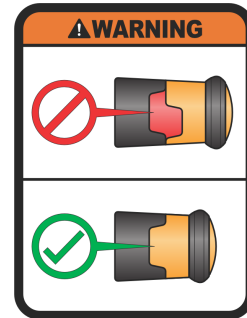
**SERIOUS INJURY CAN OCCUR ON THIS EQUIPMENT. YOU MUST FOLLOW THESE PRECAUTIONS TO AVOID INJURY!**

1. Before using, read all the warnings and obtain instruction on the use of this machine. Use only for intended exercise. **DO NOT** modify the machine.
2. Obtain a medical exam before beginning any exercise program.
3. Keep body, hair and clothing free of all moving objects.
4. Inspect the machines before use. **DO NOT** use if it appears damaged. **DO NOT** attempt to fix a broken or jammed machine. Notify staff immediately.
5. Be certain that weight pin is completely inserted. Use only the pin provided by the manufacturer. If unsure, seek assistance.
6. Never pin the weights or prop plate into an elevated position. **DO NOT** use the machine if found in this condition. **DO NOT** attempt to fix. Seek assistance.
7. Inspect cables and their connections before using machine. **DO NOT** attempt to fix. Seek assistance.
8. Use only the incremental weights supplied by the manufacturer. **DO NOT** use dumbbells or other means to add resistance to the machine.
9. Children must not be allowed near this machine. Supervise teenagers.
10. Manufacturer recommends that all equipment be secured to the floor to stabilize and eliminate rocking or tipping over. Use a licensed contractor.
11. **DO NOT REMOVE THIS LABEL. REPLACE IF DAMAGED.**

### FCC Compliant Cable



### Pull Pin Knob



### Serial Number



### Strap Training

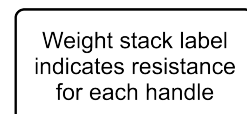
**⚠ WARNING**

**SERIOUS INJURY CAN OCCUR ON THIS EQUIPMENT. YOU MUST FOLLOW THIS PRECAUTION TO AVOID INJURY!**

**DO NOT USE** for support during stretching, or allow resistance straps, ropes or other means to be attached to it unless the equipment is secured to floor. This can result in injury.

Contact manufacturer with questions.

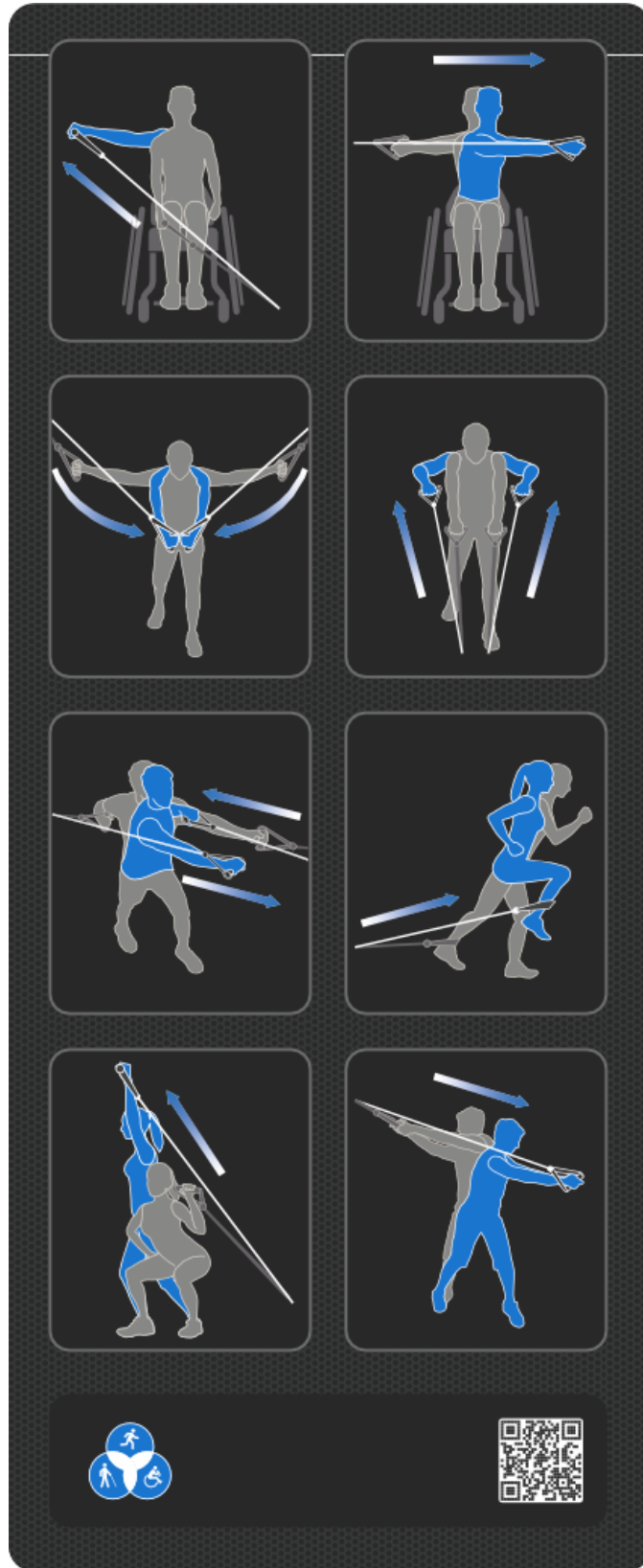
### Weight at Handle



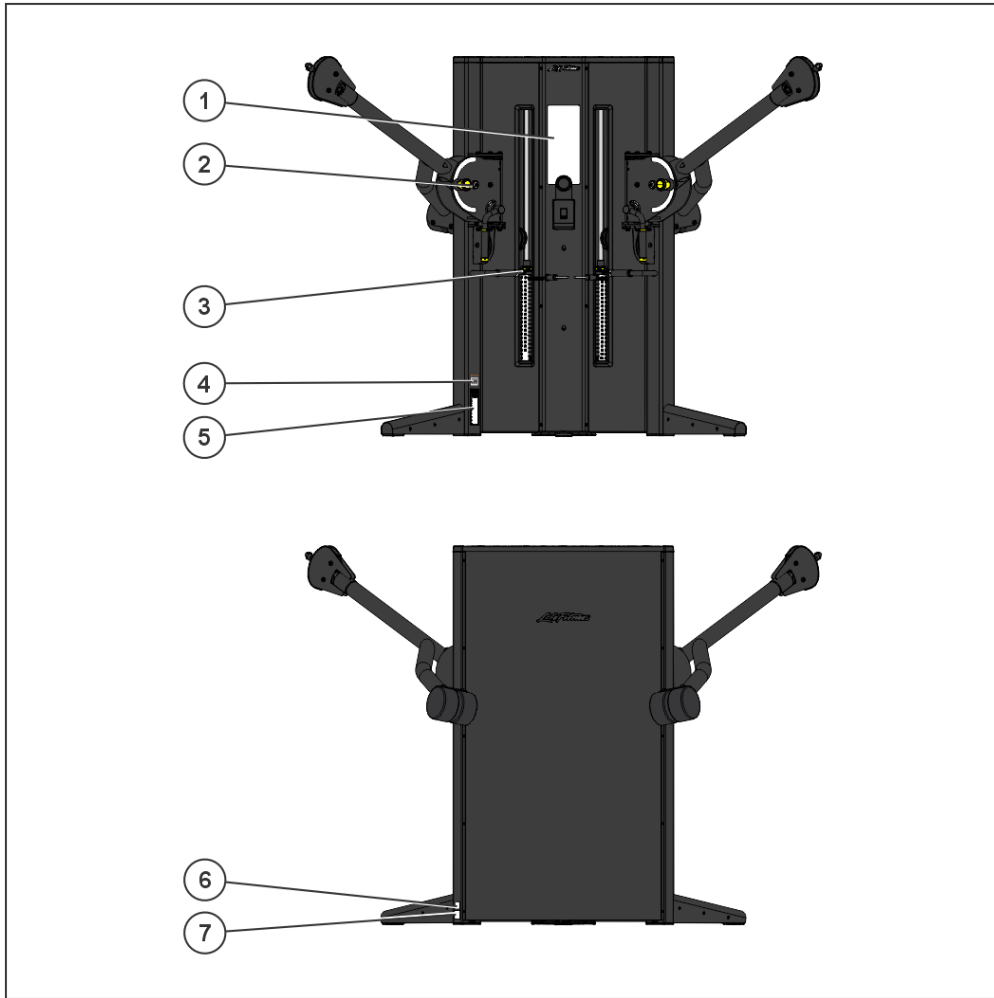
# Placard

Instructive placard label.

LCM-UC



**Label Locations**  
**Universal Cable (LCM-UC)**

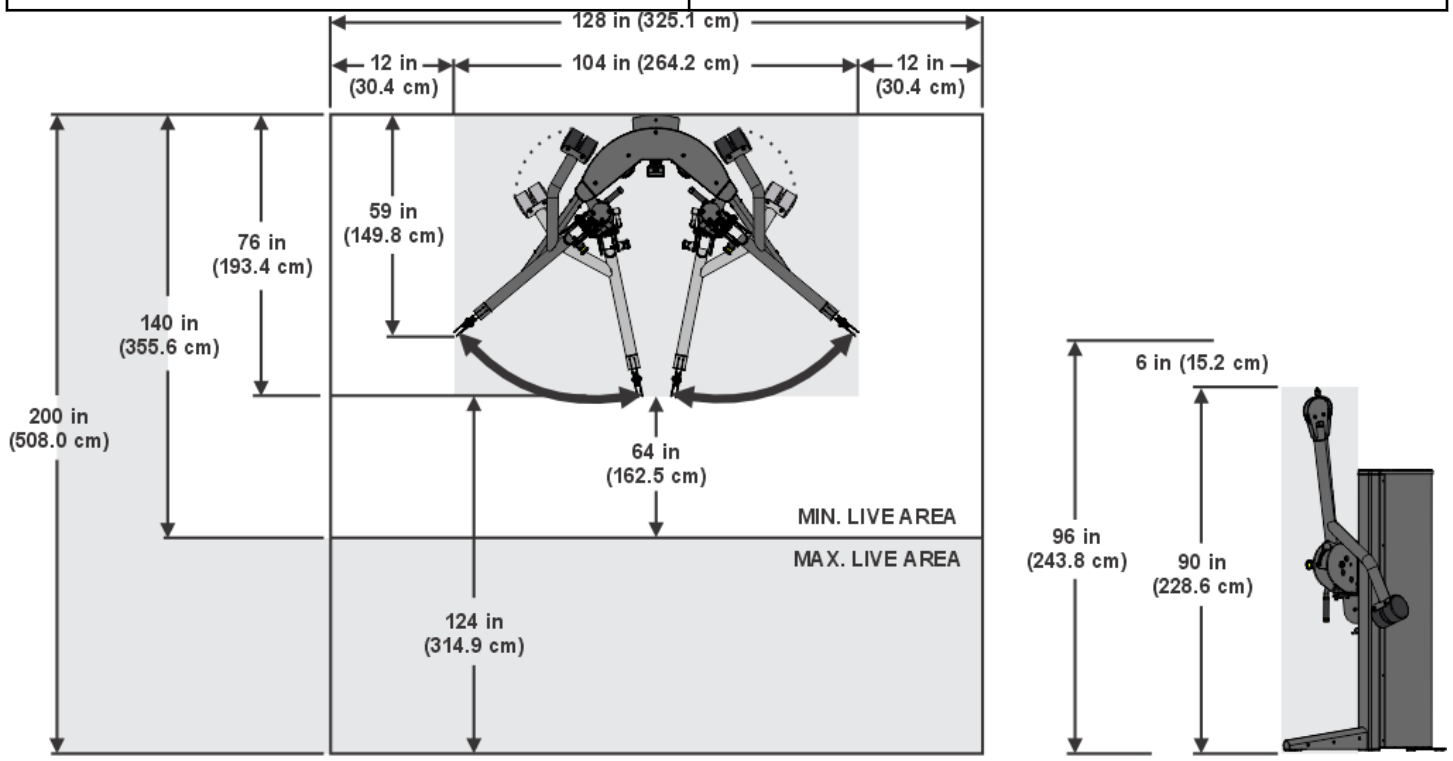


Item	Description	Qty.
1	Placard	1
2	Pull Pin Knob	2
3	Weight at Handle	2
4	Strap Training	1
5	General Warning	1
6	FCC Compliant Cable	1
7	Serial Number	1

# 2. Specifications

## Universal Cable (LCM-UC)

Machine Weight:	1181.7 lbs.	536.0 kg.
Size (L x W x H):	in. = 59 x 104 x 90	cm = 149.8 x 264.2 x 228.6
Minimum Live Area (L x W x H):	in. = 140 x 128 x 96	cm = 355.6 x 325.1 x 243.8
Maximum Live Area (L x W x H):	in. = 200 x 128 x 96	508 x 325.1 x 243.8
Weight Stack Weight (x2):	300 lbs.	136 kg.
Effective User Resistance (x2):	100 lbs.	45.3 kg.
Resistance Ratio:	3:1	
Workarm Range, Horizontal:	61.5 degrees	
Workarm Range, Vertical:	160 degrees	



# 3. Maintenance Procedures

## Maintenance Schedule

ACTION	DAILY	WEEKLY	MONTHLY	AS NEEDED
<b>CLEAN</b>				
Guide Rods			•	
Hand Grips				•
Shrouds			•	
Upholstery	•			
<b>INSPECT</b>				
Belt	•			
Cable	•			
Frame		•		
Hand Grips		•		
Hardware		•		
Labels			•	
Paint			•	
Shrouds	•			
<b>LUBRICATE</b>				
Guide Rods				•
Workarm Pivot Shafts				•
<b>WAX</b>				
Frames				•

### Clean

- Upholstery with an approved or compatible cleaner.
- Guide rods with a cotton cloth.
- Hand grips with an approved or compatible cleaner.

### Wax

- Frames with a standard, non-abrasive, wax finish.

### Inspect

- Cables. Look for wear or damage and proper tension. Pay close attention at bends and attachment points.
- Belts. Look for wear or damage and proper tension. Pay close attention at bends and attachment points.
- Hardware. Check for loosening. Tighten as required.
- Frames. Inspect for wear and damage.
- Hand grips. Check for wear and damage.
- For paint chips. Fill in immediately with manufacturers touch-up paint.
- Jam nut at top of weight stack for tightness.

### Lubricate

- Lubricate guide rods with Break-Free® brand lubricant (part number SK50-P0005-0000). Apply the lubricant to a cotton cloth, and then run the cotton cloth up and down the guide rods as needed.

**NOTE:** Only a few drops of lubricant are required for each guide rod.

- Lubricate workarm pivot shafts with a light coating of multipurpose synthetic grease.

## Once a Day

- Wipe down upholstery with a mild soap and water or comparable all purpose cleaner.
- Visually inspect cables for wear at and around connections and along the entire length of the cable. Always replace at first sign of wear.

## Once a Week

- Visually inspect all hardware for loosening, tampering or wear.
- Check jam nut at top of weight stack for tightness.
- Check condition of hand grips.
- Check cables for stretch and adjust as necessary by loosening the large Jam Nut on top of the weight stack and by screwing in the Threaded Plug until cable is tight and the weight stack pin goes in all holes easily. Securely tighten the large Jam Nut when finished.
- Inspect shrouds for damage and clean as necessary.

## Once a Month

- Clean guide rods with Break-Free® brand lubricant (part number SK50-P0005-0000). Clean tops of bearings at stack and inspect for heavy buildup on rods below the head plate. Lift half of stack and do a visual inspection, then clean as necessary.
- Inspect hardware on all machines and tighten any bolts or nuts that may have loosened over the life of the product.
- Contact [Customer Support Services](#) to replace any worn, damaged, or unreadable labels or instructional placards and to ensure that you are always using the latest version of labels and instructional placards.

## Notes

- Use polishing compound (such as car wax) and remove shoe scuffs from powder coated surfaces as necessary.

## Cleaning the Shrouds

- Adherence to regular and proper cleaning procedures is recommended to preserve the appearance.

**NOTE:** Spray the approved cleaner on a towel, and then wipe down the shrouds to avoid saturation of shroud inlays.

## Minimize Scratches

- Wash the shrouds with an approved or compatible cleaner. Do not scrub brushes on the shrouds. Fresh paint splashes, grease and smeared glazing compounds can be removed easily before drying by rubbing lightly with isopropyl alcohol. Afterward, a warm final wash should be made.

## Approved and Compatible Cleaners

Two preferred cleaners have been approved by reliability experts: PureGreen 24 and Gym Wipes. Both cleaners will safely and effectively remove dirt, grime and sweat from equipment. PureGreen 24 and the Antibacterial Force formula of Gym Wipes are both disinfectants that are effective against MRSA and H1N1.

PureGreen 24 is available in a spray which is convenient to use. Apply the spray to a microfiber cloth and wipe down the equipment. Use PureGreen 24 on the equipment for at least 2 minutes for general disinfection purposes and at least 10 minutes for fungus and viral control.

Gym Wipes are large, durable pre-moistened wipes to use on the equipment before and after workouts. Use Gym Wipes on the equipment for at least 2 minutes for general disinfection purposes.

Contact Customer Support Services to order these cleaners (1-800-351-3737 or email: [customersupport@lifefitness.com](mailto:customersupport@lifefitness.com)).

Mild soap and water or a mild non-abrasive household cleaner can also be used to clean the display and all exterior surfaces. Use a soft microfiber cloth only. Apply the cleaner to the microfiber cloth before cleaning. DO NOT use ammonia or acid based cleaners. DO NOT use abrasive cleaners. DO NOT use paper towels. DO NOT apply cleaners directly to the equipment surfaces.

## Removal of Paint, Marking Pens, or Labels

- Butyl cellosolve works well for removal of paints, marking pen inks, lipstick, etc.
- Labels, stickers, etc. may be removed using kerosene. When the solvent will not penetrate sticker material, apply heat (hair dryer) to soften the adhesive and promote removal. GASOLINE SHOULD NOT BE USED.

## **Important Hazards**

- DO NOT use abrasive or highly alkaline cleaners on the shrouds.
- NEVER scrape shrouds with squeegees, razor blades or other sharp instruments.
- DO NOT clean shrouds in hot sun or at elevated temperatures.
- NEVER use benzene, gasoline, acetone or carbon tetrachloride on the shrouds.
- Manufacturer recommends that cables be inspected daily after installation and replaced annually.

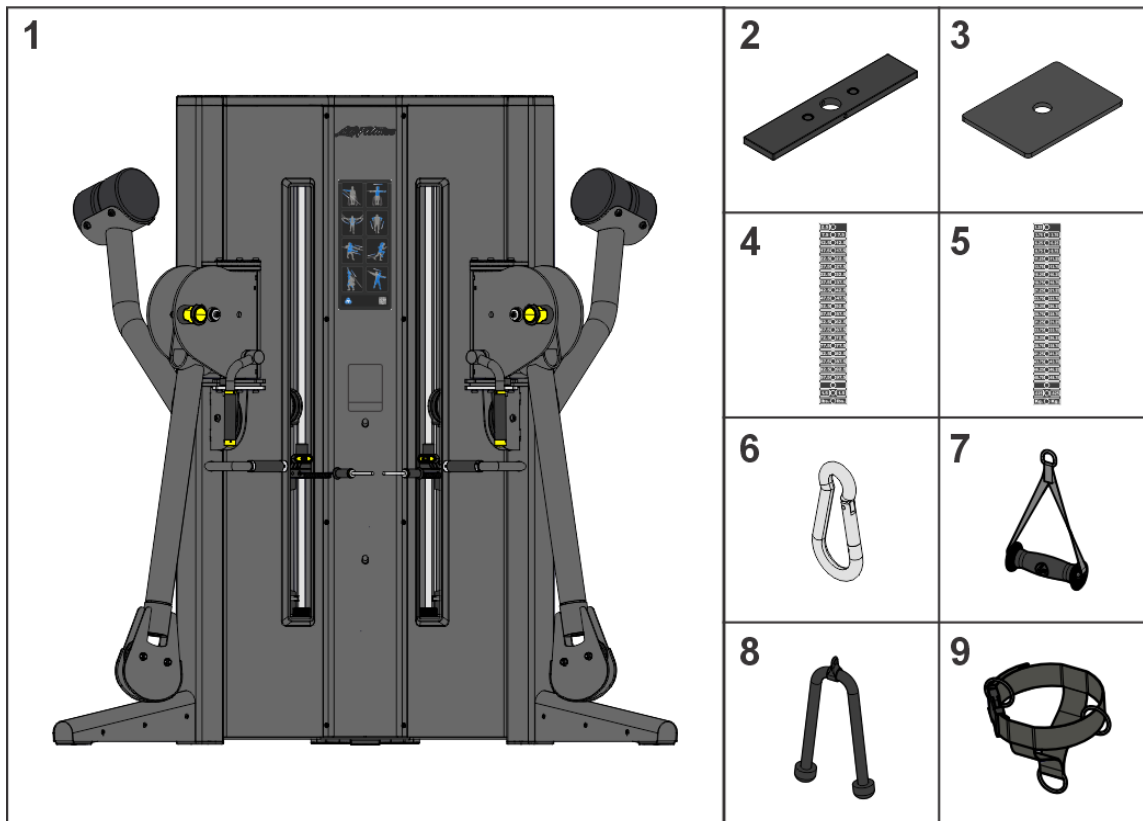
# 4. Assembly

## Tools Required

- #2 Phillips screwdriver
- 3 mm Allen wrench
- 4 mm Allen wrench
- 7 mm Allen wrench
- 3 mm socket
- 4 mm socket
- 7 mm socket
- 4 mm wrench or Crescent wrench
- 17 mm wrench
- 24 mm wrench
- External retaining ring pliers
- Rubber mallet
- Safety glasses
- Tape measure
- Torque wrench

## Components

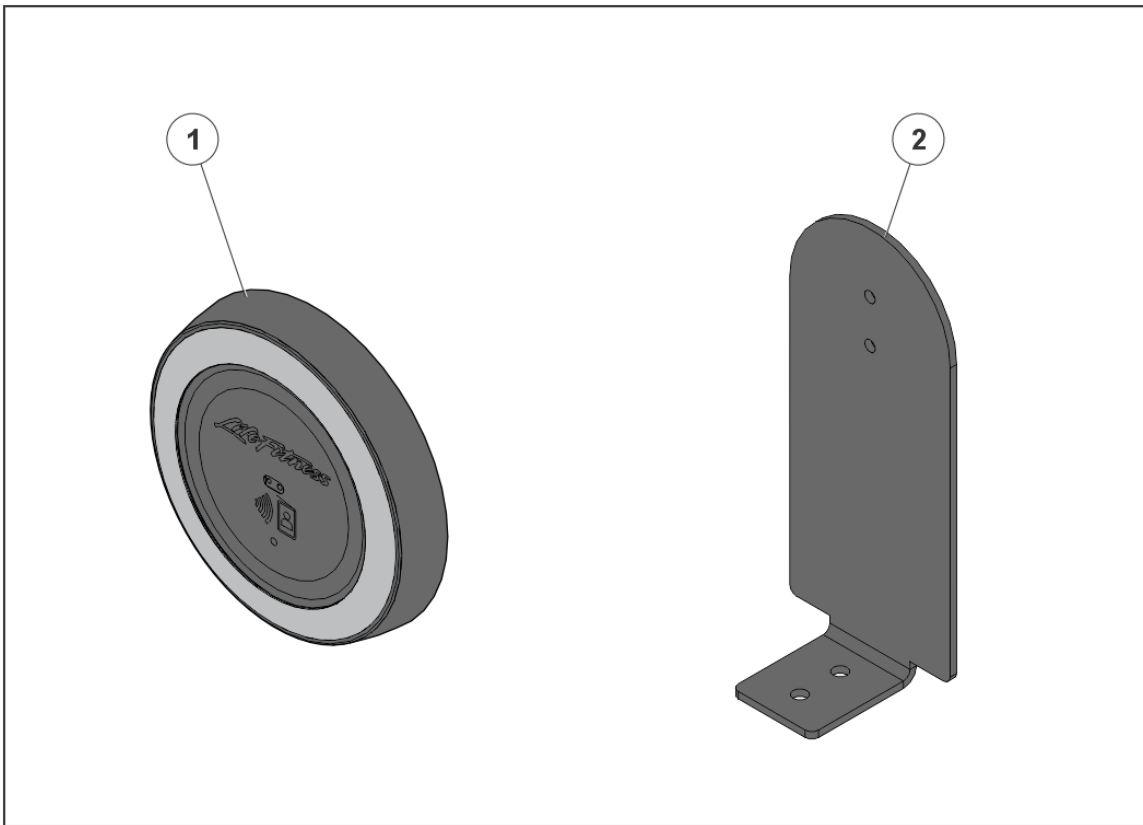
### S-Trim



Item	Description	Qty.
1	Universal Cable Tower	1
2	15 pound/6.8 kg weight plate	38
3	Foot Pad	2
4	Weight Stack Label, Lb.	2
5	Weight Stack Label, Kg.	2
6	Snap Link	2
7	Short Handle	2
8	Triceps Rope	1
9	Ankle Strap	1

## T-Trim

Includes all items from S-Trim, plus:



Item	Description	Qty.
1	LF Connect Puck	1
2	Puck Mount Bracket	1

## Assembly Order

The Universal Cable weight stacks can be assembled from the front or rear. Follow in the order as needed.

### Front Weight Stack Assembly

1. Remove Workarms (if needed)
2. Foot Brace Assembly
3. Weight Stack Assembly (from front)

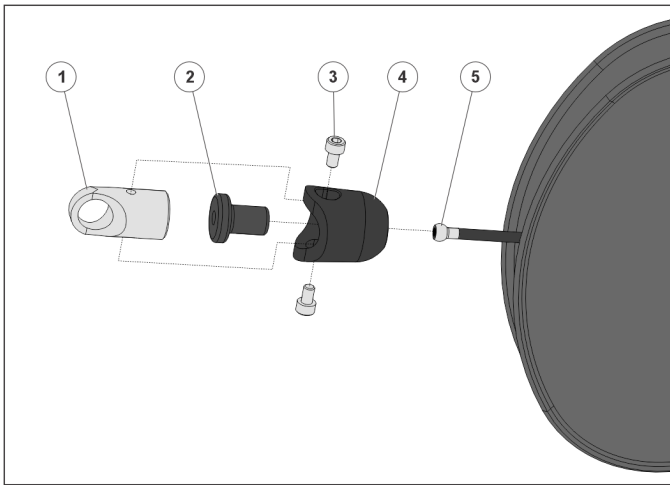
### Rear Weight Stack Assembly

1. Remove Workarms (if needed)
2. Foot Brace Assembly
3. Weight Stack Assembly (from rear)

## Remove Workarms (optional)

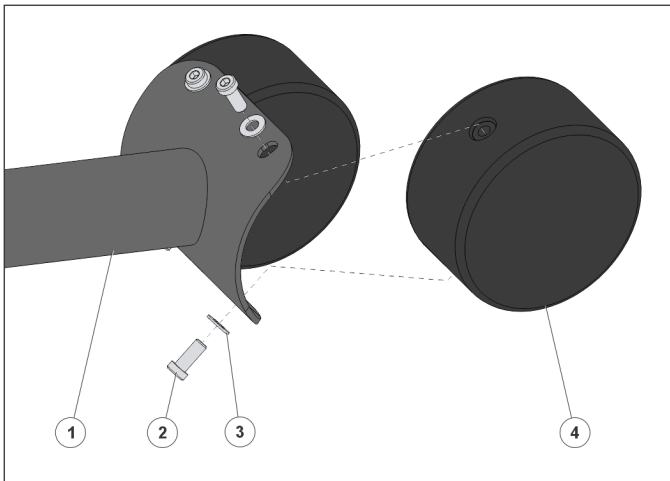
If the Universal Cable is too large to fit through a doorway, follow these instructions to remove and reinstall its workarm/s.

1. Remove hardware from the cable assembly and set aside.



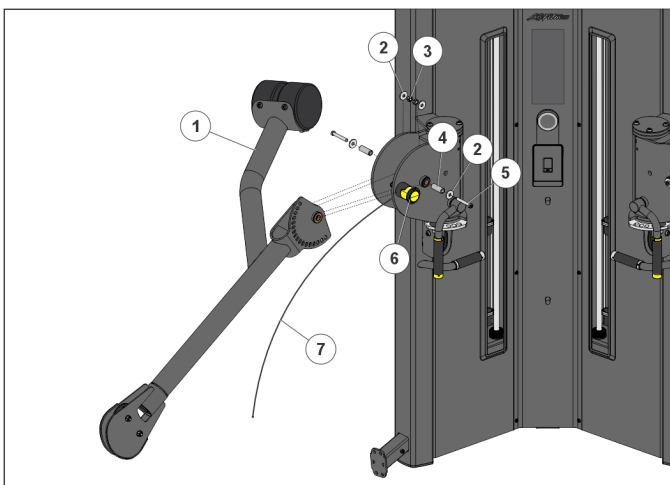
Item	Description	Qty.
1	Cable End Link	1
2	Cable End Insert	1
3	M5 x 0.8 Screw	2
4	Cable End Housing	1
5	Cable Assembly	1

2. The counter weights can be removed to reduce the weight of the workarm. If desired, remove the hardware and remove the counterweights from the workarm.



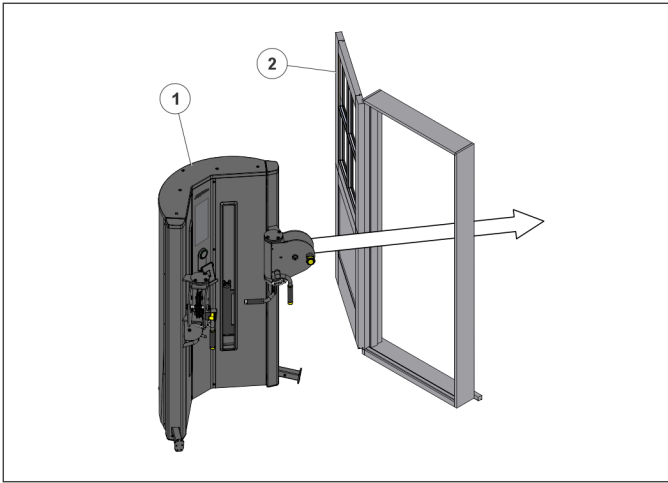
Item	Description	Qty.
1	Workarm Assembly	1
2	M10 x 25mm Screw	4
3	Washer, 3/8 SAE SS	4
4	Counterweight	2

3. Remove hardware and extend pull pin knob. Then remove cable assembly as you remove the workarm assembly.



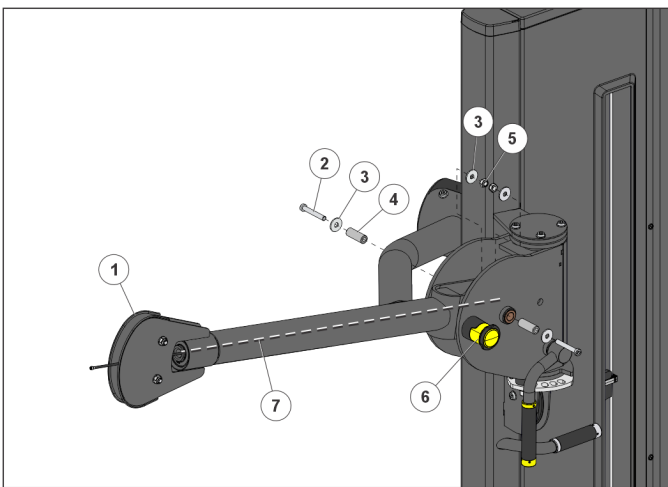
Item	Description	Qty.
1	Workarm Assembly	1
2	Washer, 3/8 x 1.25 OD	4
3	Nut, M10 Hex Nylock	2
4	Shaft, 1.0 x 1.79	2
5	M10 x 70mm Screw	2
6	Pull Pin Knob	1
7	Cable Assembly	1

4. Move Universal Cable through doorway and into desired location.



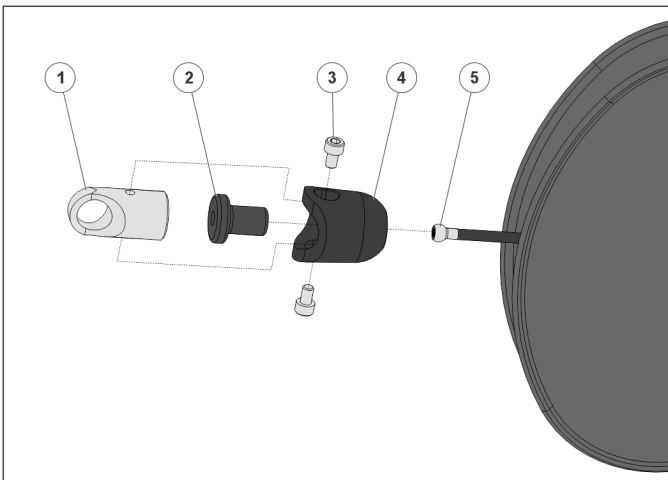
Item	Description	Qty.
1	Universal Cable	1
2	36inch wide Doorway	1

5. Route the cable through the workarm, then extend pull pin knob to put the workarm back into place. Add hardware and tighten to **20-29 ft-lbs/27.1-39.3 Nm**.



Item	Description	Qty.
1	Workarm Assembly	1
2	M10 x 70mm Screw	2
3	Washer, 3/8 x 1.25 OD	4
4	Shaft, 1.0 x 1.79	2
5	Nut, M10 Hex Nylock	2
6	Pull Pin Knob	1
7	Cable Assembly	1

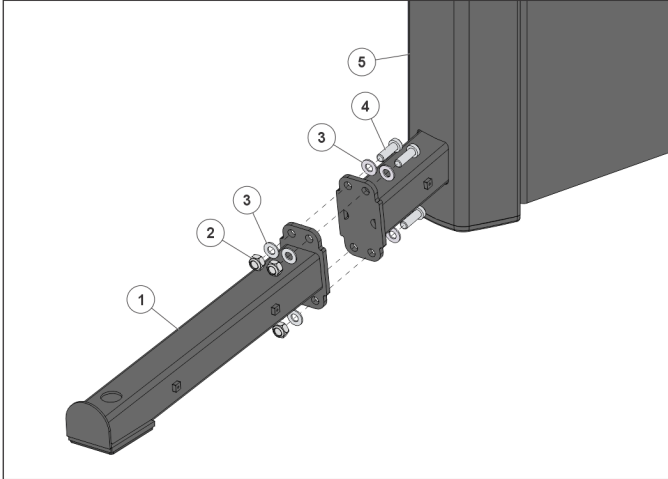
6. Reattach hardware to the cable end and tighten to **8-10 in-lbs/0.9-1.1Nm**.



Item	Description	Qty.
1	Cable End Link	1
2	Cable End Insert	1
3	M5 x 0.8 Screw	2
4	Cable End Housing	1
5	Cable Assembly	1

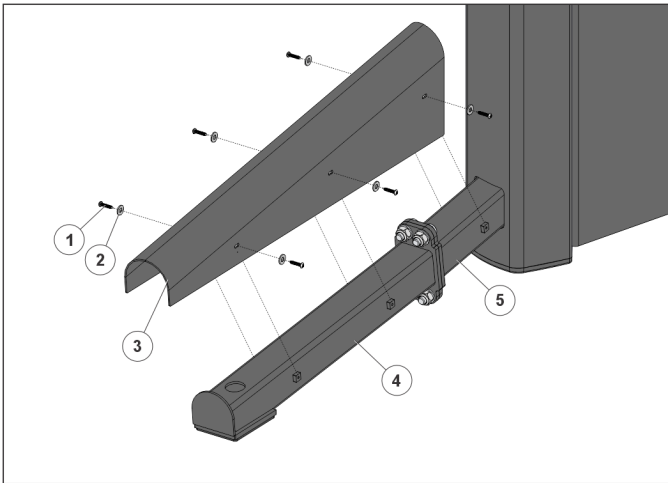
## Foot Brace Assembly

1. Attach the foot brace to the Universal Cable tower and tighten hardware to **20-29 ft-lbs/27.1-39.8 Nm**. Repeat on opposite side of tower.



Item	Description	Qty.
1	Foot Brace	1
2	Nut, M10 Hex Nylock	4
3	Washer, 3/8 SAE SS	8
4	M10 x 30mm Screw	4
5	Universal Cable Tower	1

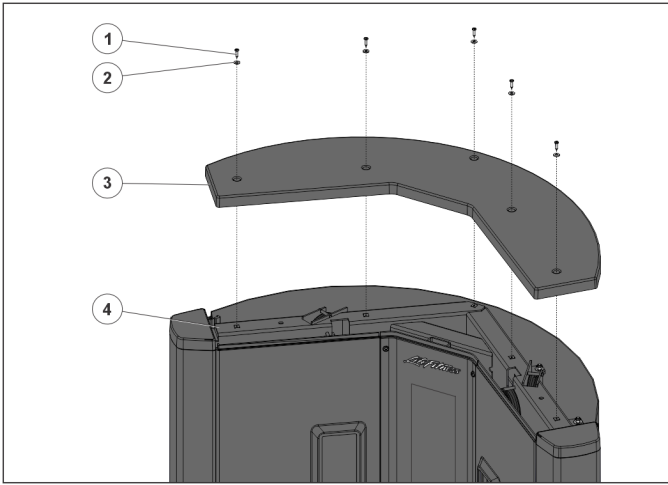
2. Attach the foot brace cover to the foot brace and Universal Cable tower, then tighten hardware to **16-20 in-lbs/1.8-2.2 Nm**. Repeat on opposite side of tower.



Item	Description	Qty.
1	Screw, 6 x 3/4 DIN PHL PAN	6
2	Washer, SAE #10	6
3	Foot Brace Cover	1
4	Foot Brace	1
5	Universal Cable Tower	1

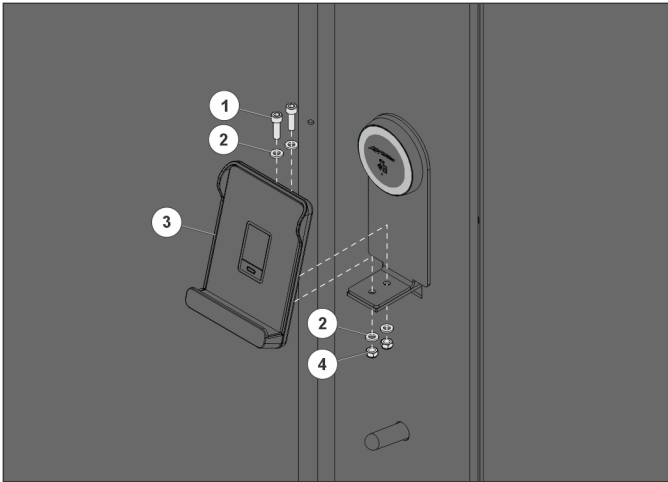
## Weight Stack Assembly (from front)

1. Remove the top cap shroud from the Universal Cable frame by removing its hardware.



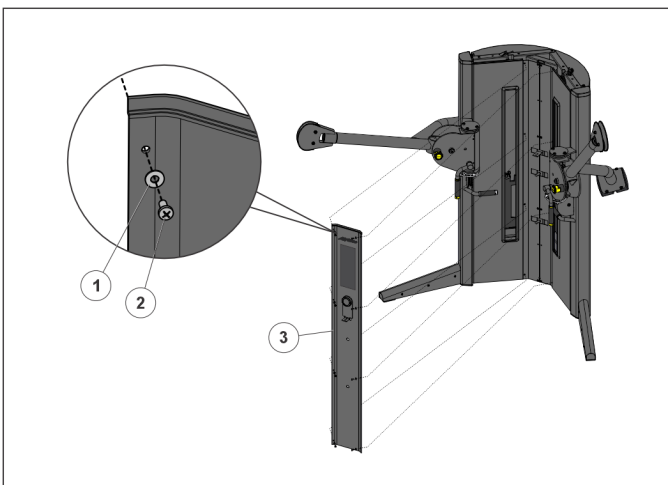
Item	Description	Qty.
1	Screw, 8 x 3/4 DIN PHL PAN	5
2	Washer, SAE #10	5
3	Shroud, Top Cap	1
4	Universal Cable Frame	1

2. Remove the phone holder assembly and its hardware. Set aside for later use.



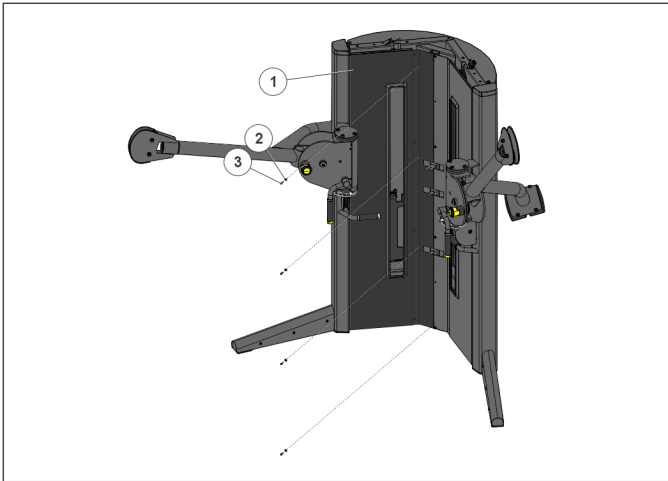
Item	Description	Qty.
1	M6 x1 20mm Screw	2
2	Washer, Flat 6mm SS	4
3	Phone Holder Assembly	1
4	Nut, M6 Hex Nylock	2

3. Remove the front middle shroud and its hardware. Set aside for later use.



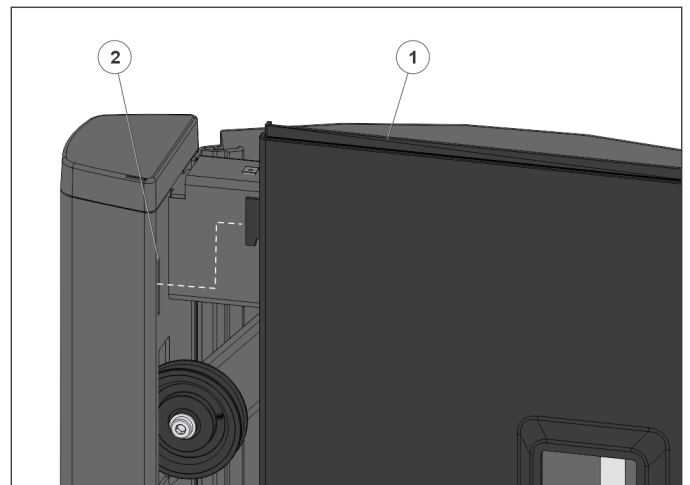
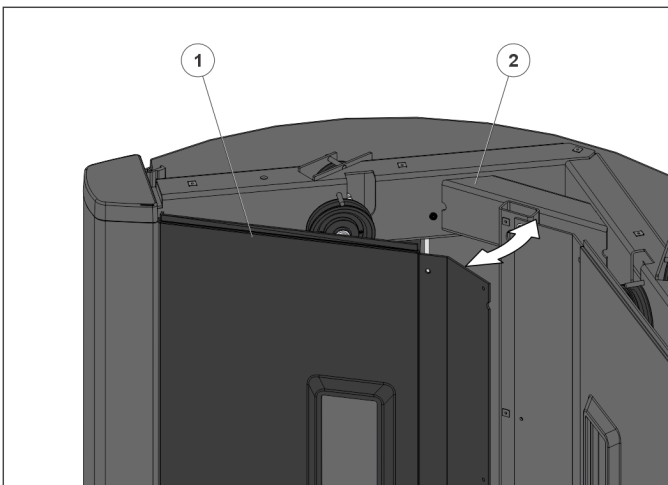
Item	Description	Qty.
1	Screw, M5 x 12 PHL PAN	4
2	Washer, SAE #10	4
3	Front Middle Shroud	1

4. Remove the front shroud hardware. Set aside for later use.



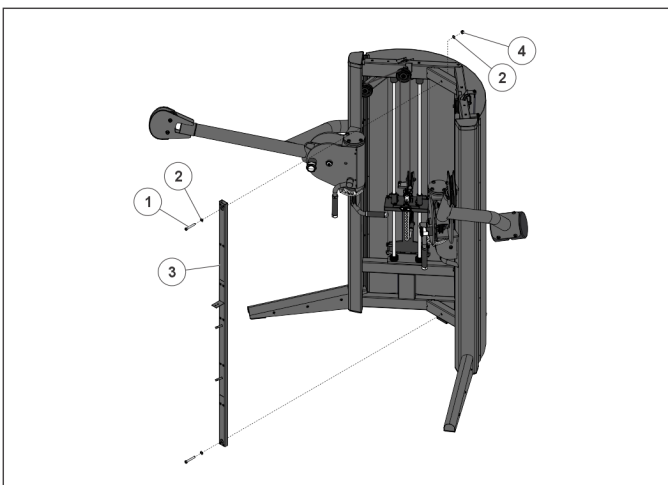
Item	Description	Qty.
1	Front Shroud	1
2	Washer, SAE #10	4
3	Screw, 8 x 3/4 DIN PHL PAN	4

5. Rotate the front shroud from the main frame, then raise front shroud so its hooks unlatch. Set aside for later use.



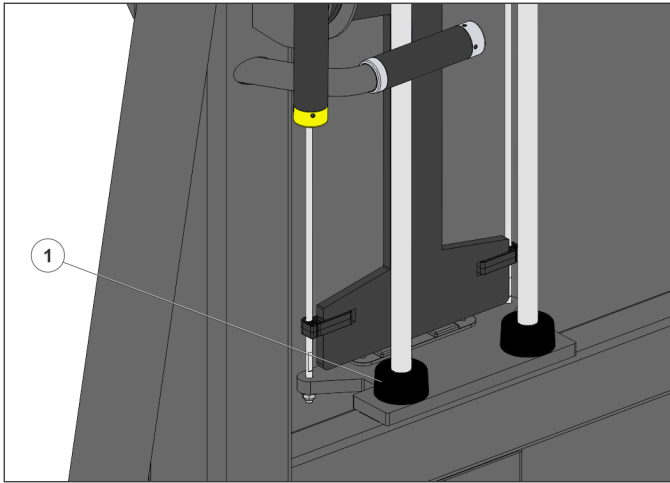
Item	Description	Qty.
1	Front Shroud	1
2	Main Frame	1

6. Remove the phone holder weldment and its hardware. Set aside for later use.



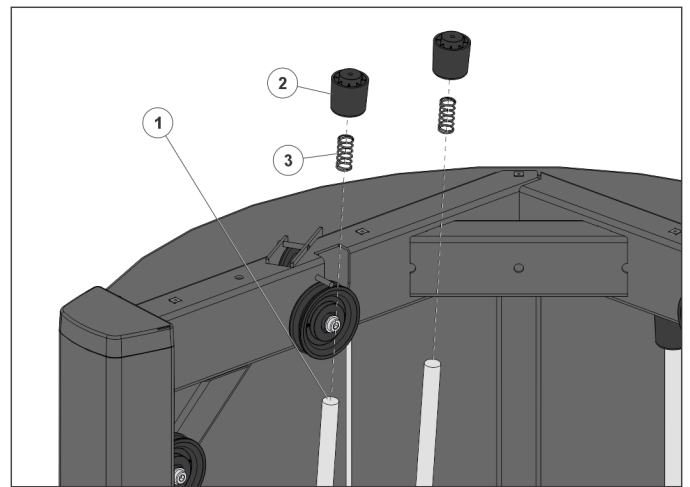
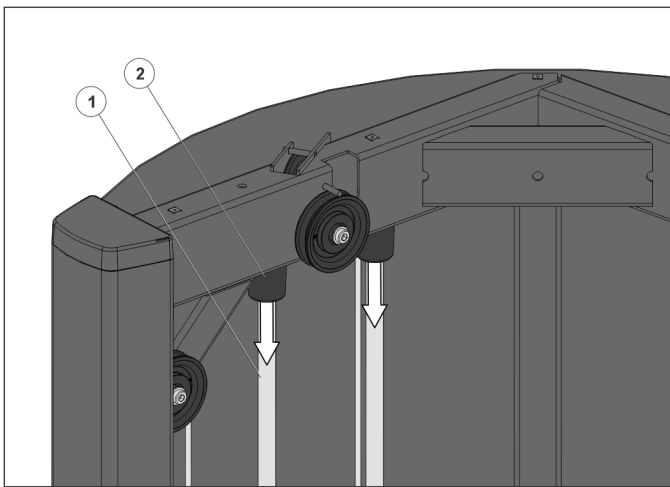
Item	Description	Qty.
1	Screw, M10 X 1.5 70mm	2
2	Washer, 3/8 SAE SS	4
3	Phone Holder Weldment	1
4	Nut, M10 Hex Nylock SS	2

7. Verify weight stack cushions are in place.



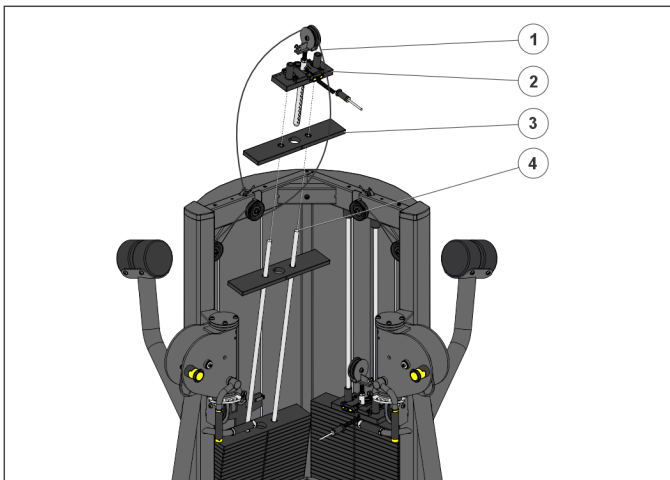
Item	Description	Qty.
1	Weight Stack Cushion	2

8. Pull guide rod housings down, then tilt guide rods back so the guide rod housings and springs can be removed.



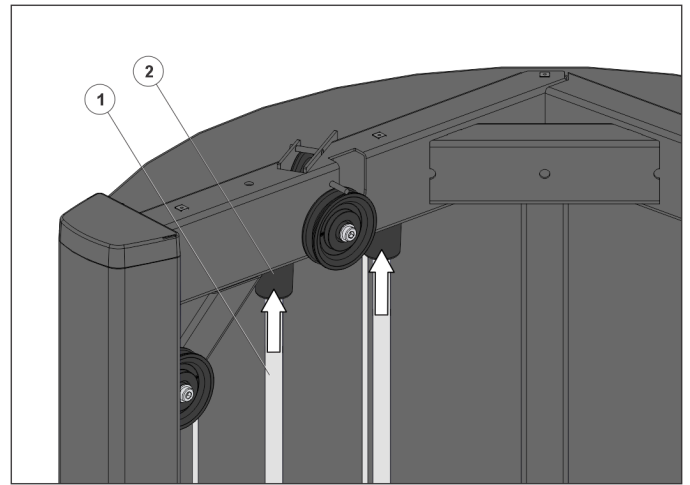
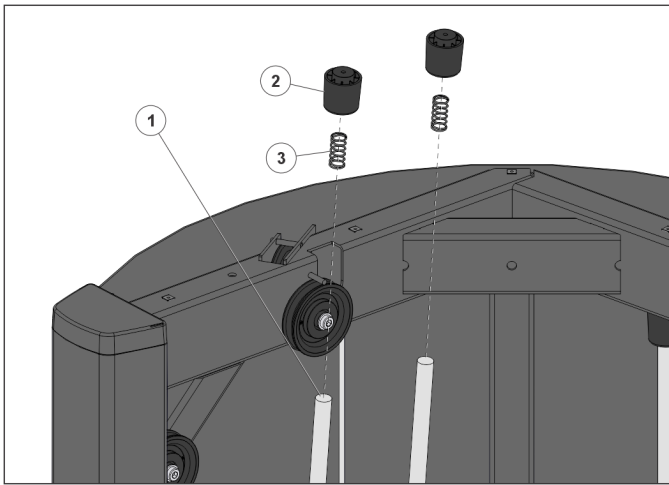
Item	Description	Qty.
1	Guide Rod	2
2	Guide Rod Housing	2
3	Spring	2

9. With the cable still attached to the headplate assembly, slide the weight plates onto the guide rods.



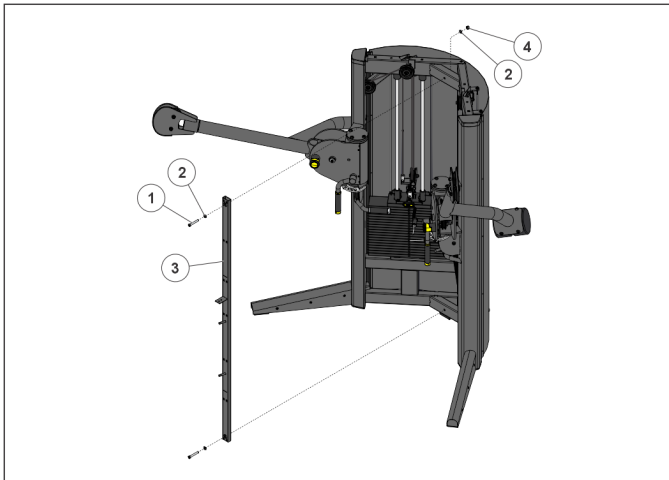
Item	Description	Qty.
1	Cable Assembly	1
2	Headplate Assembly	1
3	Weight Plate, 15 pound/6.8 kg	19
4	Guide Rods	2

10. Place the springs between the guide rods and guide rod housings, then allow the springs to lock the guide rod housings into place.



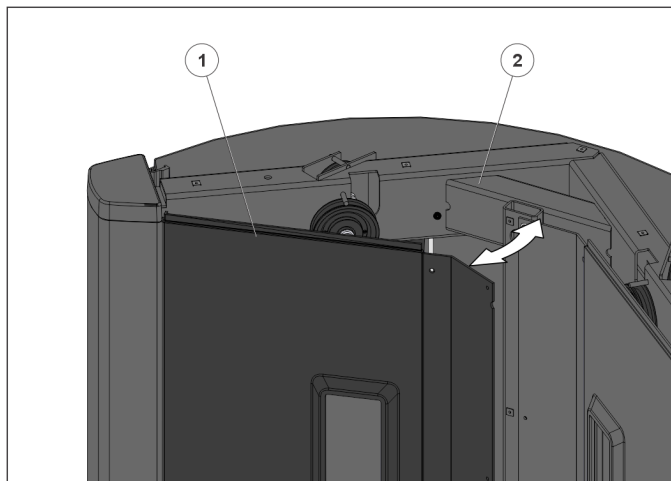
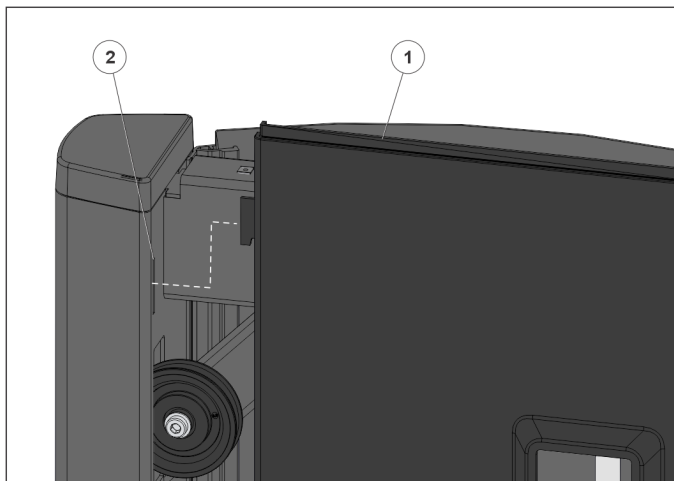
Item	Description	Qty.
1	Guide Rod	2
2	Guide Rod Housing	2
3	Spring	2

11. Attach the phone holder weldment with its hardware and tighten to **20-29 ft-lbs/27.1-39.3 Nm**.



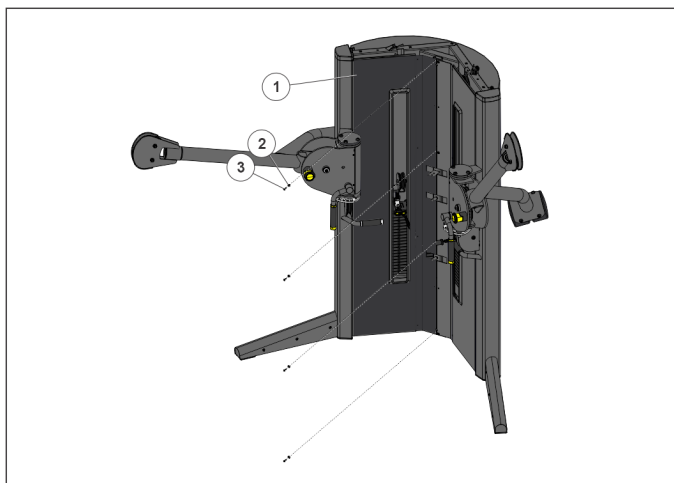
Item	Description	Qty.
1	Screw, M10 X 1.5 70mm	2
2	Washer, 3/8 SAE SS	4
3	Phone Holder Weldment	1
4	Nut, M10 Hex Nylock SS	2

12. Hook the front shroud into the main frame, then rotate it up against the main frame.



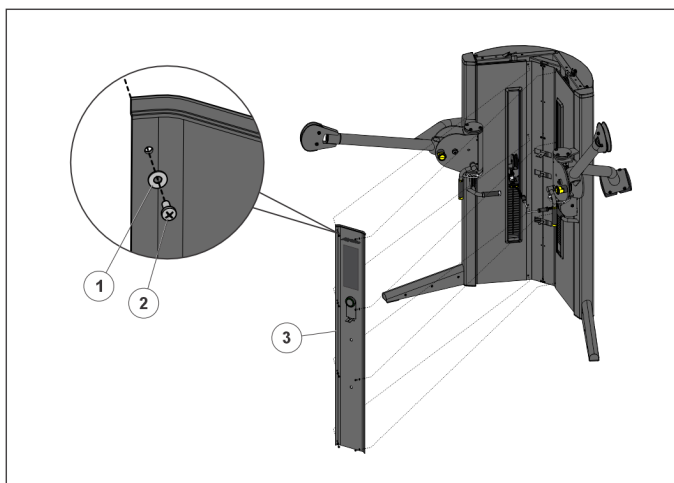
Item	Description	Qty.
1	Front Shroud	1
2	Main Frame	1

13. Attach the front shroud with its hardware and tighten to **16-20 in-lbs/ 1.8-2.2 Nm**.



Item	Description	Qty.
1	Front Shroud	1
2	Washer, SAE #10	4
3	Screw, 8 x 3/4 DIN PHL PAN	4

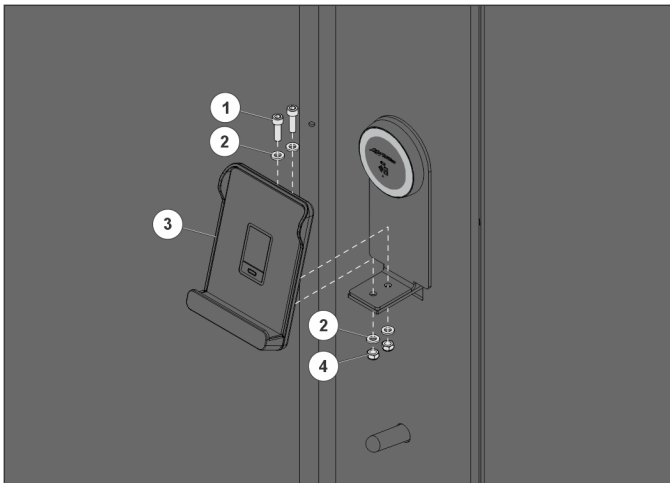
14. Attach the front middle shroud with its hardware and tighten to **8-10 in-lbs/ 0.9-1.1 Nm**.



Item	Description	Qty.
1	Screw, M5 x 12 PHL PAN	4
2	Washer, SAE #10	4
3	Front Middle Shroud	1

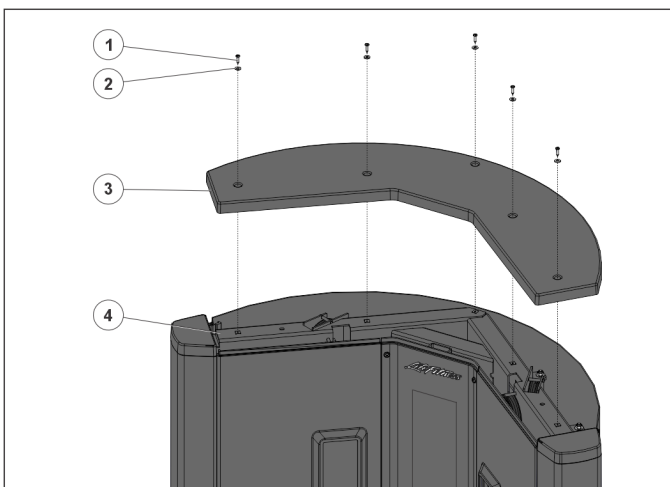
15. Go back to step 1 of **Weight Stack Assembly (from front)** and assemble the other weight stack assembly.

16. Attach the phone holder assembly with its hardware and tighten to **25-29 in-lbs/ 2.8-3.2 Nm**.



Item	Description	Qty.
1	M6 x1 20mm Screw	2
2	Washer, Flat 6mm SS	4
3	Phone Holder Assembly	1
4	Nut, M6 Hex Nylock	2

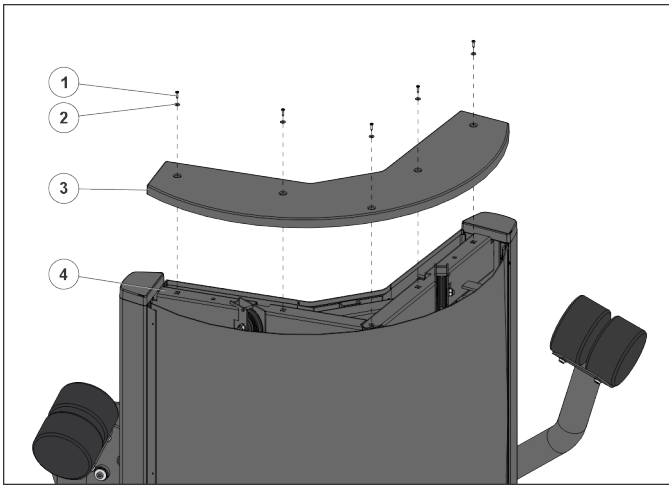
17. Replace the top cap shroud to the Universal Cable frame and tighten hardware to **16-20 in-lbs/ 1.8-2.2 Nm**.



Item	Description	Qty.
1	Screw, 8 x 3/4 DIN PHL PAN	5
2	Washer, SAE #10	5
3	Shroud, Top Cap	1
4	Universal Cable Frame	1

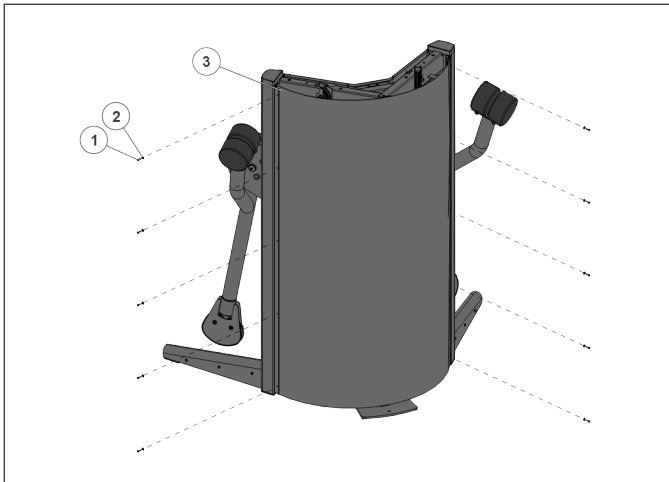
## Weight Stack Assembly (from rear)

1. Remove the top cap shroud from the Universal Cable frame by removing its hardware.



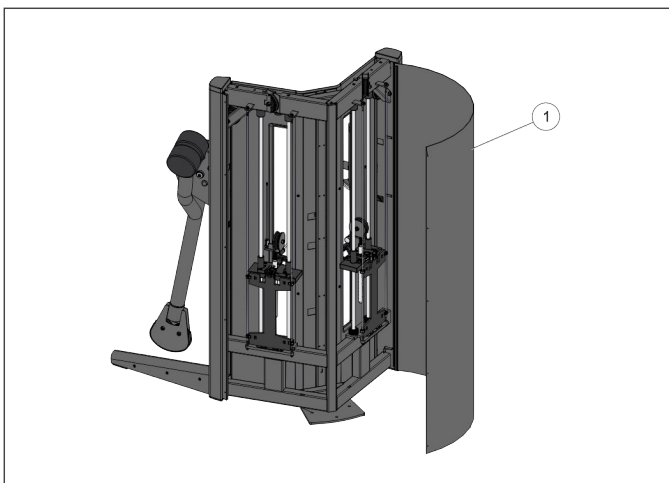
Item	Description	Qty.
1	Screw, 8 x 3/4 DIN PHL PAN	5
2	Washer, SAE #10	5
3	Shroud, Top Cap	1
4	Universal Cable Frame	1

2. Remove the hardware from both sides of the rear shroud.



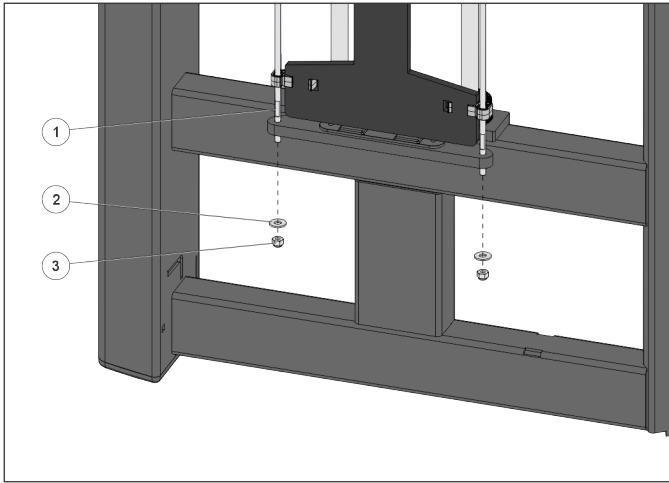
Item	Description	Qty.
1	Screw, 8 x 3/4 DIN PHL PAN	10
2	Washer, SAE #10	10
3	Rear Shroud	1

3. Pull the rear shroud from the left side, then the right side.



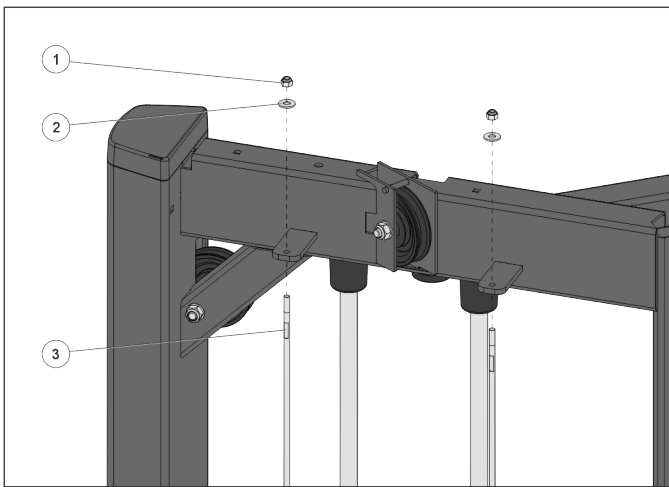
Item	Description	Qty.
1	Rear Shroud	1

4. Holding the flat section of the increment guide rod from spinning, remove the bottom increment weight hardware.



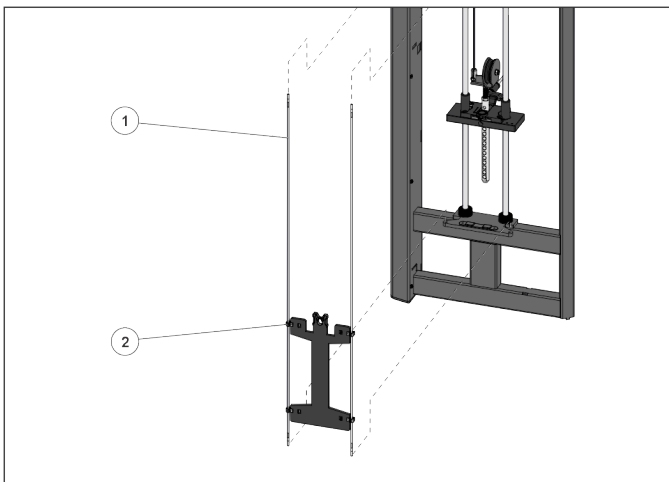
Item	Description	Qty.
1	Increment Weight Guide Rod	2
2	Washer, Flat 1/4 ID ZN	2
3	Nut, Nylock 1/4-20 ZN	2

5. Holding the flat section of the increment guide rod from spinning, remove the top increment weight hardware.



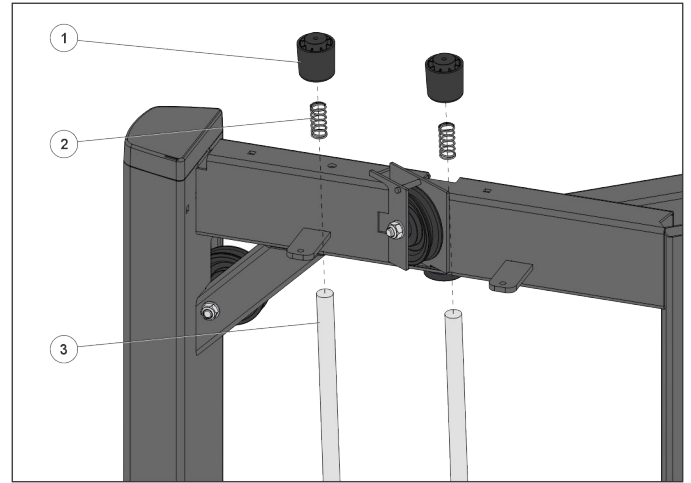
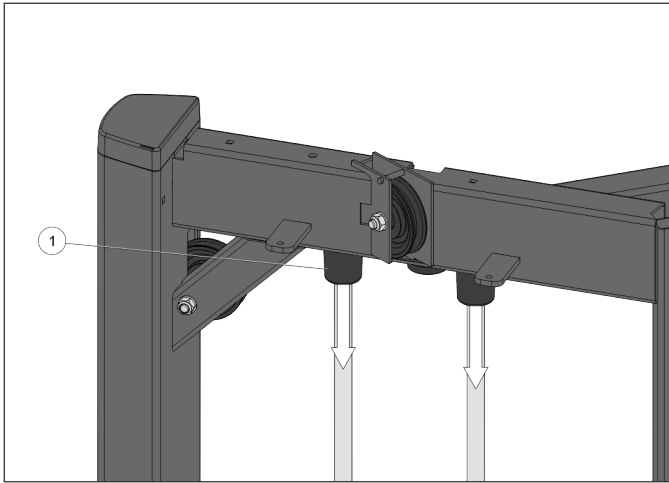
Item	Description	Qty.
1	Nut, Nylock 1/4-20 ZN	2
2	Washer, Flat 1/4 ID ZN	2
3	Increment Weight Guide Rod	2

6. Lift the increment guide rods up, then tilt back so the increment guide rods and increment weight assembly can be removed.



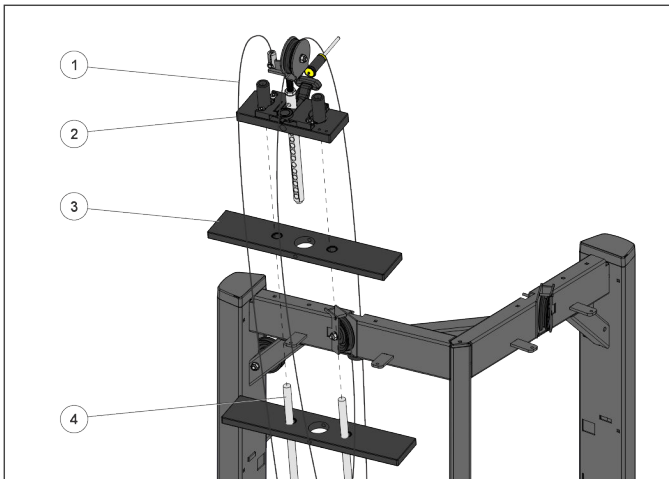
Item	Description	Qty.
1	Increment Weight Guide Rod	1
2	Increment Weight Assembly	1

7. Pull guide rod housings down, then tilt guide rods back so the guide rod housings and springs can be removed.



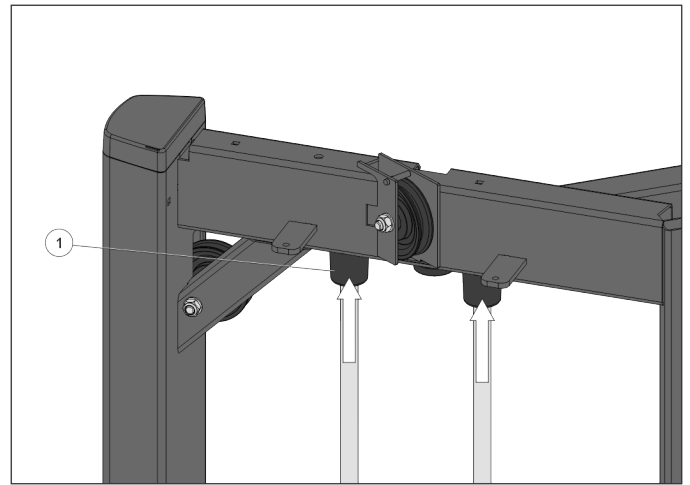
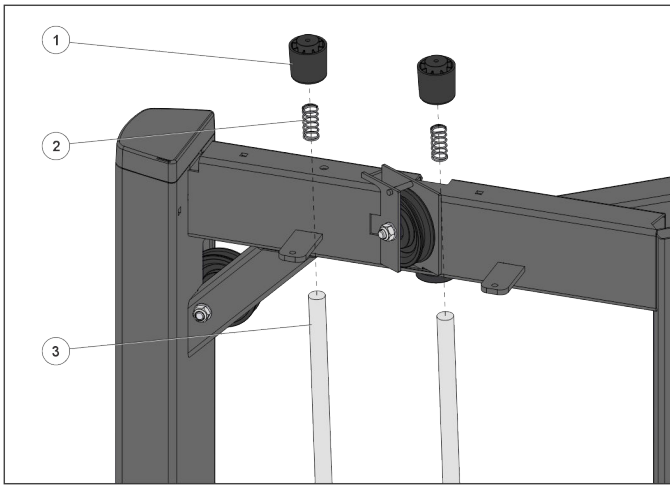
Item	Description	Qty.
1	Guide Rod Housing	2
2	Spring	2
3	Guide Rod	2

8. With the cable still attached to the headplate assembly, slide the weight plates onto the guide rods.



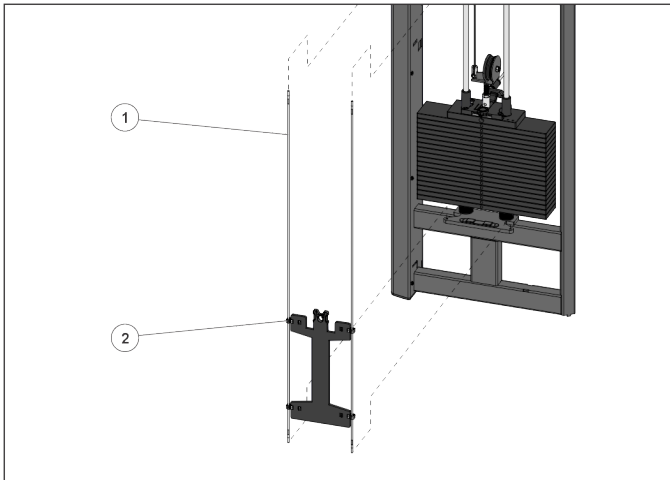
Item	Description	Qty.
1	Cable Assembly	1
2	Headplate Assembly	1
3	Weight Plate, 15 pound/6.8 kg	19
4	Guide Rods	2

9. Place the springs between the guide rods and guide rod housings, then allow the springs to lock the guide rod housings into place.



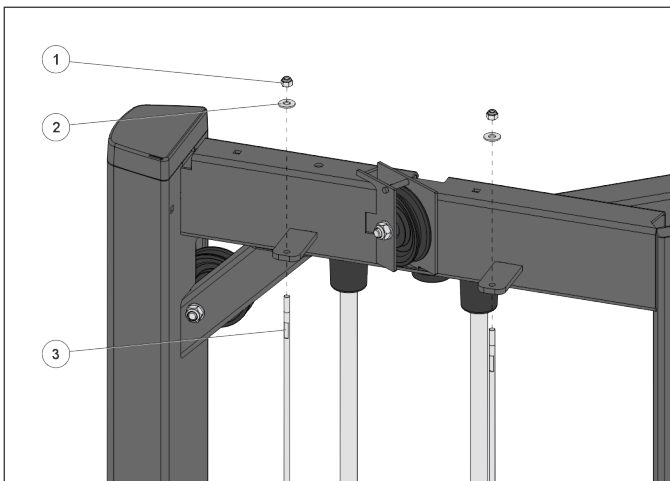
Item	Description	Qty.
1	Guide Rod Housing	2
2	Spring	2
3	Guide Rod	2

10. Reinsert the increment guide rods and the increment weight assembly.



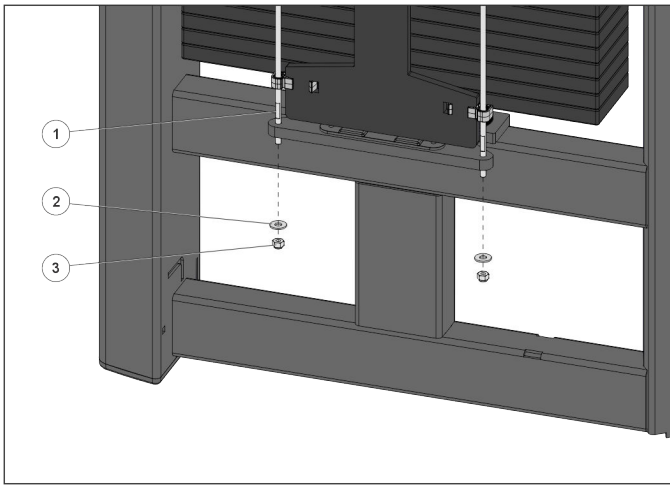
Item	Description	Qty.
1	Increment Weight Guide Rod	1
2	Increment Weight Assembly	1

11. Holding the flat section of the increment guide rod from spinning, attach the top increment weight hardware and tighten to **40-50 in-lbs/ 4.5-5.6Nm**.



Item	Description	Qty.
1	Nut, Nylock 1/4-20 ZN	2
2	Washer, Flat 1/4 ID ZN	2
3	Increment Weight Guide Rod	2

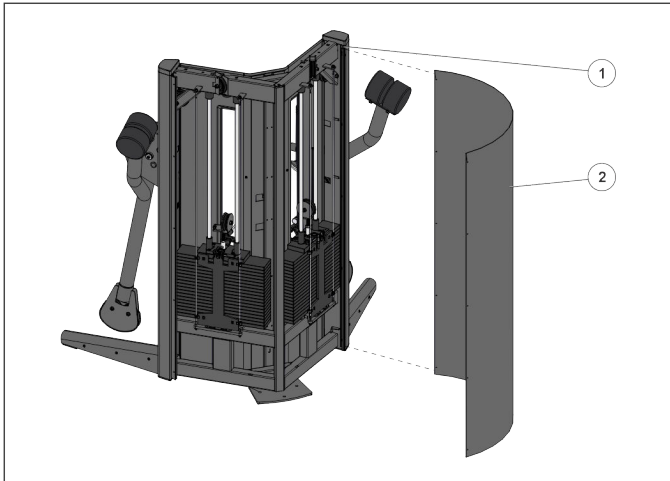
12. Holding the flat section of the increment guide rod from spinning, attach the bottom increment weight hardware and tighten to **40-50 in-lbs/ 4.5-5.6 Nm**.



Item	Description	Qty.
1	Increment Weight Guide Rod	2
2	Washer, Flat 1/4 ID ZN	2
3	Nut, Nylock 1/4-20 ZN	2

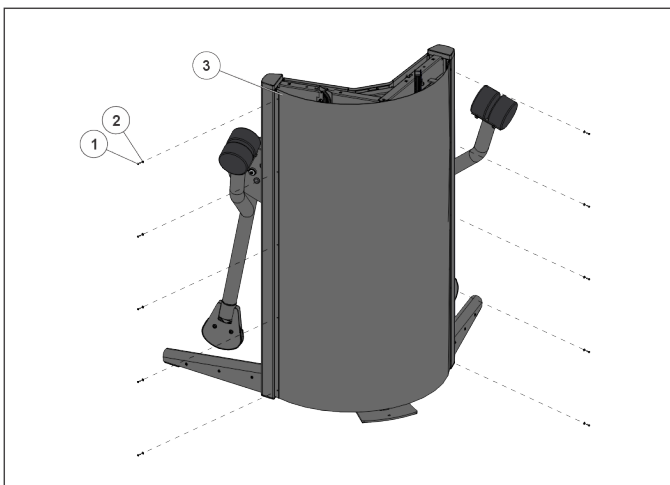
13. Go back to step 1 of **Weight Stack Assembly (from rear)** and assemble the other weight stack assembly.

14. Insert the rear shroud into the shroud support rails on both sides of Universal Cable.



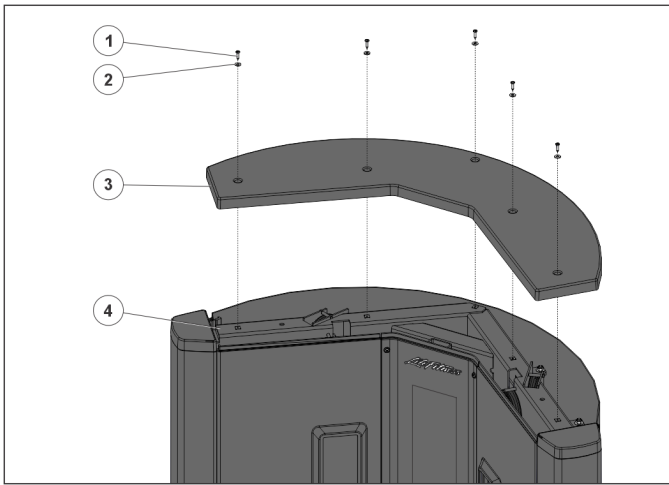
Item	Description	Qty.
1	Shroud Support Rail	1
2	Rear Shroud	1

15. Attach the hardware on both sides of the rear shroud and tighten to **16-20 in-lbs/ 1.8-2.2 Nm**.



Item	Description	Qty.
1	Screw, 8 x 3/4 DIN PHL PAN	10
2	Washer, SAE #10	10
3	Rear Shroud	1

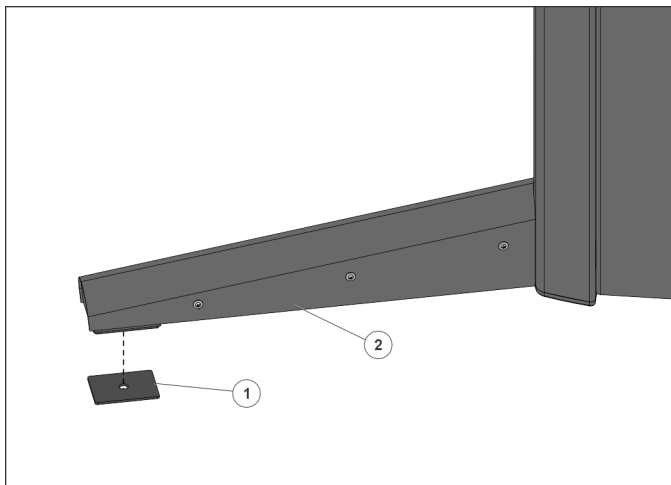
16. Replace the top cap shroud to the Universal Cable frame and tighten hardware to **16-20 in-lbs/ 1.8-2.2 Nm**.



Item	Description	Qty.
1	Screw, 8 x 3/4 DIN PHL PAN	5
2	Washer, SAE #10	5
3	Shroud, Top Cap	1
4	Universal Cable Frame	1

## Level Unit

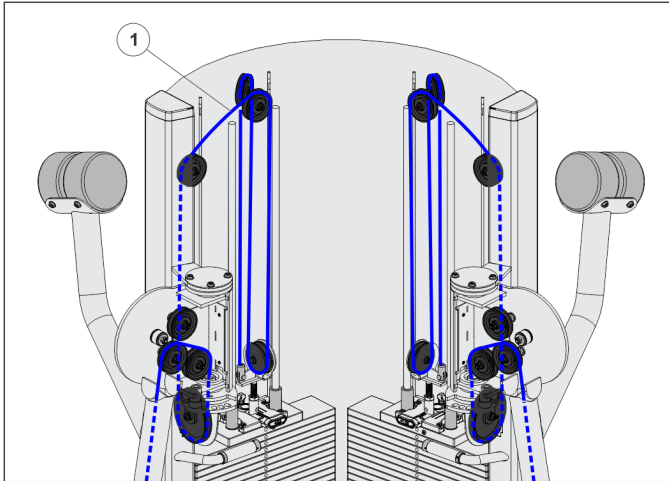
If needed, use the extra footpad to place under the installed footpad to level the unit. Repeat on opposite side of tower.



Item	Description	Qty.
1	Footpad	1
2	Foot Brace	1

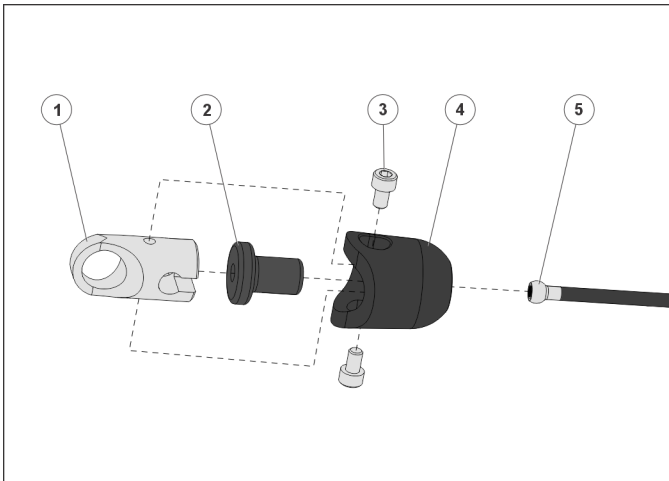
## Cable Installation

1. Follow these instructions for installing the cables on the Universal Cable. Please note there are two identical cables used for the left and right side of the tower. Instructions display the left side.



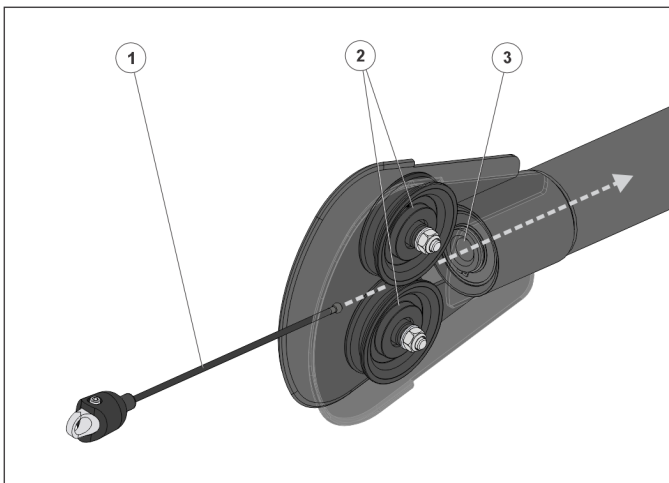
Item	Description	Qty.
1	Cable Assembly	2

2. Pull either ball-end of the cable assembly through the cable end housing and the cable end insert, then slide the ball-end of the cable assembly into the cable end link. Fasten with M5 x 0.8 screws and tighten to **8-10 in-lbs/ 0.9-1.1 Nm**



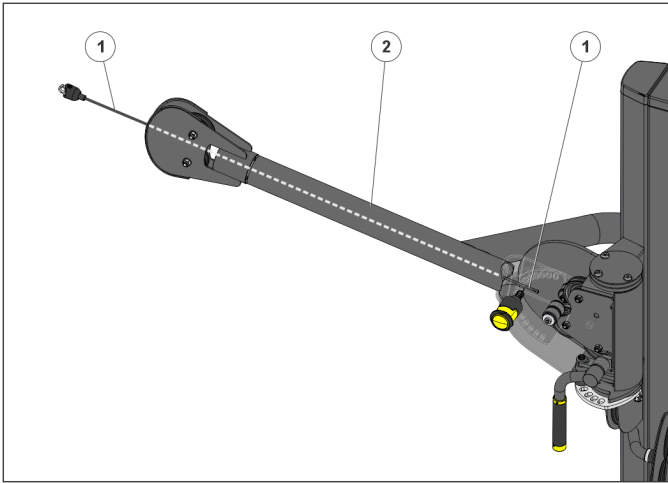
Item	Description	Qty.
1	Cable End Link	1
2	Cable End Insert	1
3	M5 x 0.8 Screw	2
4	Cable End Housing	1
5	Cable Assembly	1

3. Route the open ball-end of the cable assembly through the pulleys and into the workarm pivot shaft.



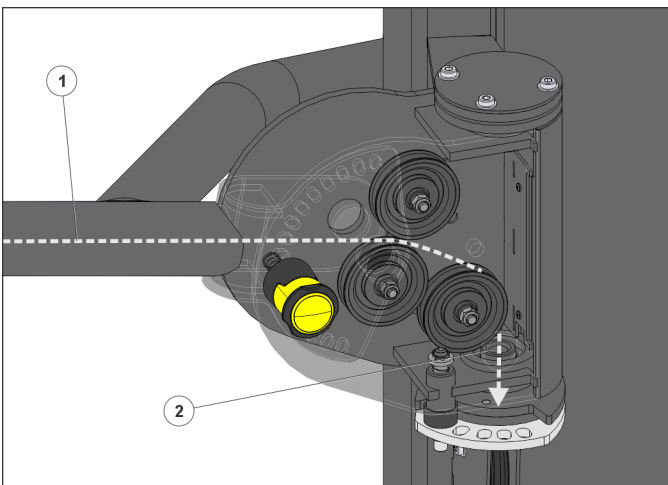
Item	Description	Qty.
1	Cable Assembly	1
2	Pulley	2
3	Workarm Pivot Shaft	1

4. With the workarm tilted upward, route the ball-end of the cable assembly down through the workarm.



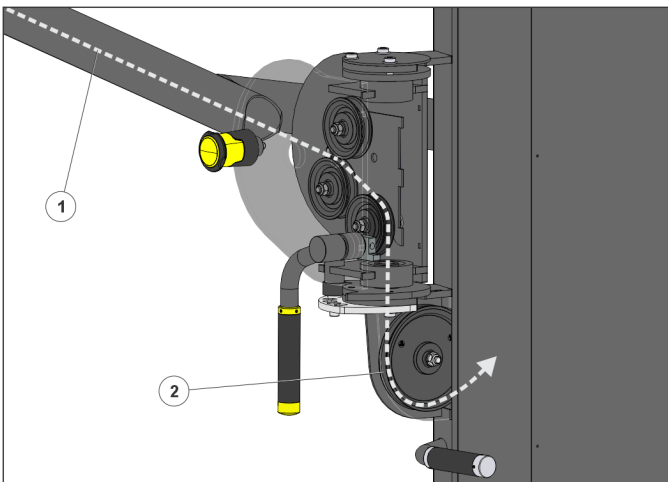
Item	Description	Qty.
1	Cable Assembly	1
2	Workarm	1

5. Route the ball-end of the cable assembly through the top and middle pulleys, then over the bottom pulley and down through the pivot shaft.



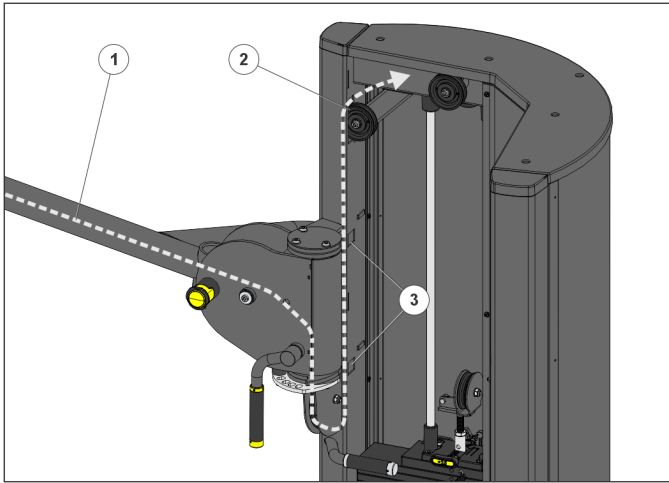
Item	Description	Qty.
1	Cable Assembly	1
2	Pivot Shaft	1

6. Route the ball-end of the cable assembly around the six-inch pulley, then up into the frame.



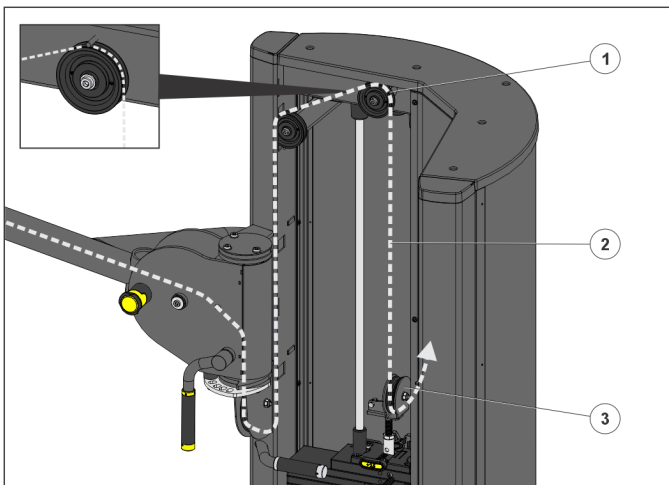
Item	Description	Qty.
1	Cable Assembly	1
2	6-Inch Pulley	1

7. Using the two cutouts in the frame, route the ball-end of the cable assembly over the frame pulley.



Item	Description	Qty.
1	Cable Assembly	1
2	Frame Pulley	1
3	Frame Cutout	2

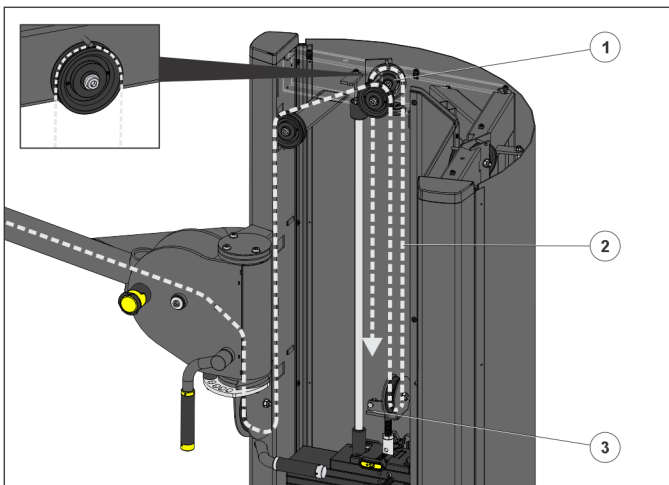
8. Route the ball-end of the cable assembly over the front upper pulley, then under the weight stack pulley.



Item	Description	Qty.
1	Front Upper Pulley	1
2	Cable Assembly	1
3	Weight Stack Pulley	1

**NOTE:** Be sure cable is routed underneath the highlighted retainer peg.

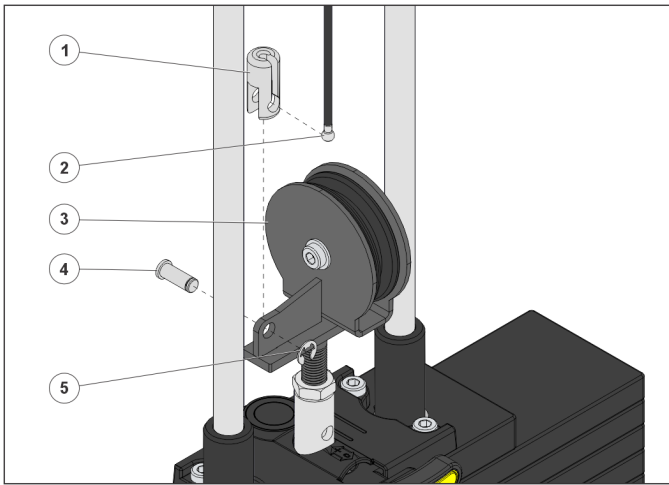
9. Route the ball-end of the cable assembly over the rear upper pulley, then towards the headplate terminal.



Item	Description	Qty.
1	Rear Upper Pulley	1
2	Cable Assembly	1
3	Headplate Terminal	1

**NOTE:** Be sure cable is routed underneath the highlighted retainer peg.

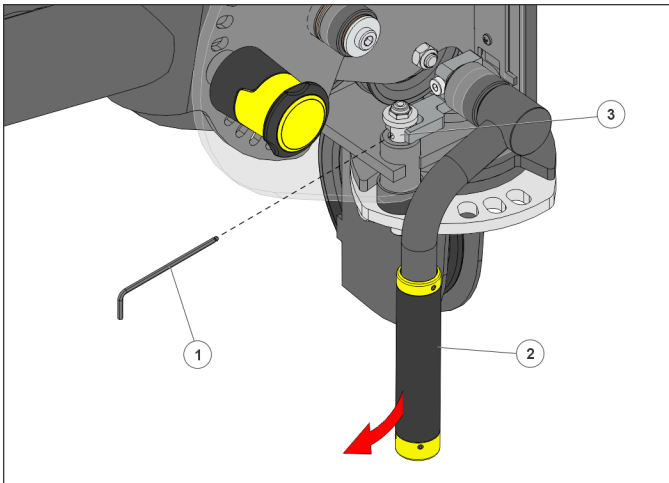
10. Insert the ball-end of the cable assembly into the cable end clevis. Pull them down and align the cable end clevis holes with the offset headplate pulley hole, then slide cable clevis pin in and attach the external 3/8" e-ring.



Item	Description	Qty.
1	Clevis, Cable End	1
2	Cable Assembly	1
3	Offset Headplate Pulley	1
4	Pin, Cable Clevis	1
5	E-Ring, External 3/8"	1

## Pull Pin Replacement

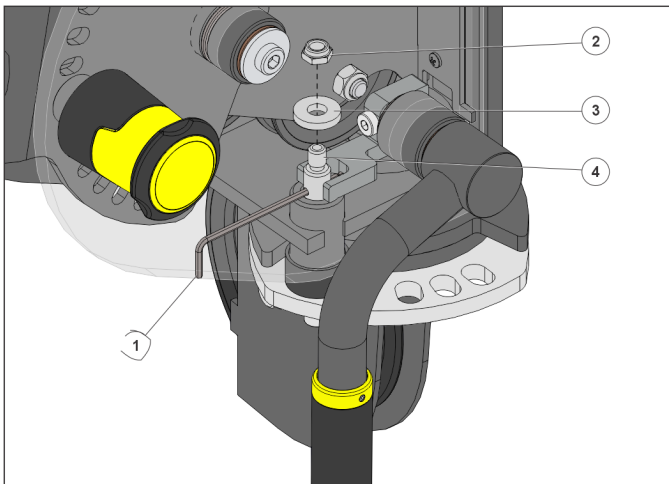
1. Lift release handle to expose the thru hole in the pull pin, then insert the hex wrench (similar tool).



Item	Description	Qty.
1	3mm Hex Wrench	1
2	Pull Pin	1
3	Release Handle Assembly	1

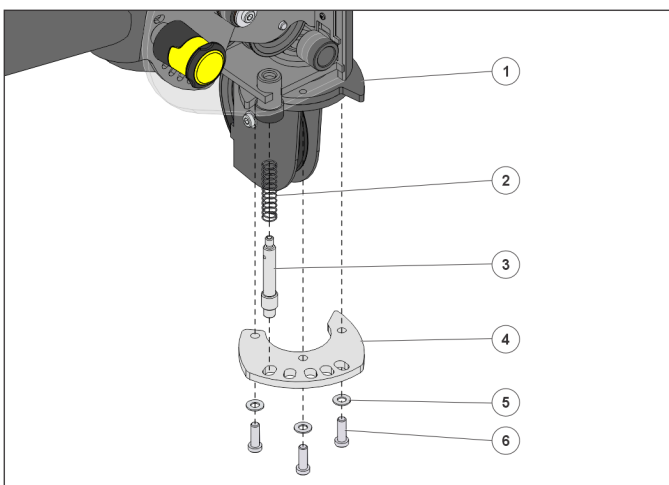
**NOTE:** If the release handle assembly is already removed, push the pull pin up from the bottom to access its thru hole.

2. Holding the pull pin in place with the hex wrench, loosen and remove the pull pin hardware.



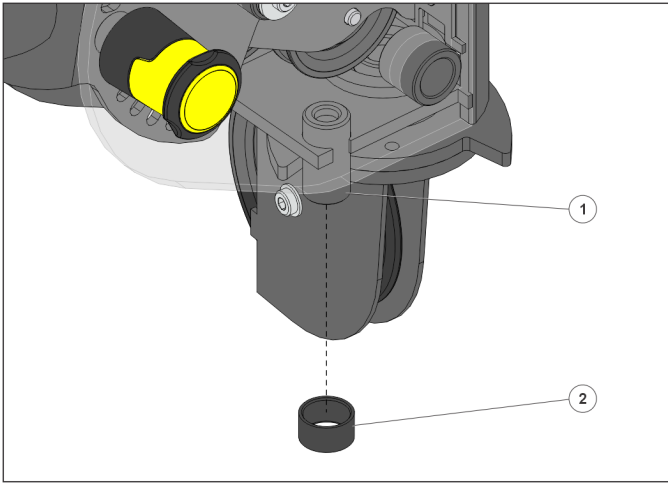
Item	Description	Qty.
1	3mm Hex Wrench	1
2	3/8-16 Nylock Nut	1
3	25mm OD Washer	1
4	Pull Pin	1

3. Remove the selector plate hardware, selector plate, then the pull pin and spring.



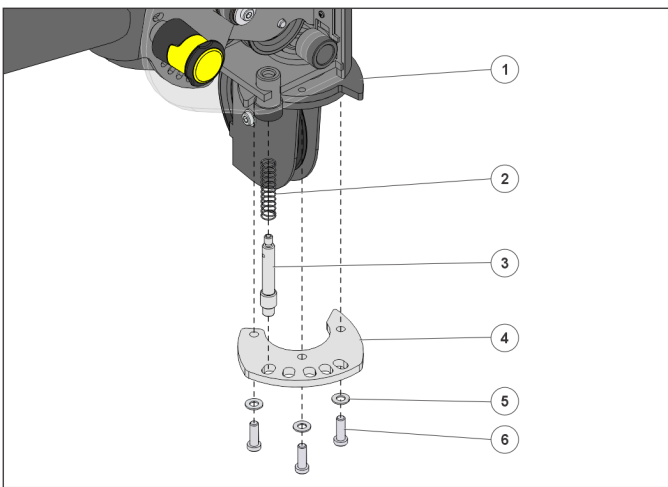
Item	Description	Qty.
1	Carriage	1
2	Spring	1
3	Pull Pin	1
4	Selector Plate	1
5	3/8 Washer	3
6	M10 x 1.5 x 30mm Screw	3

4. Check and replace the bumper sleeve at this time if needed.



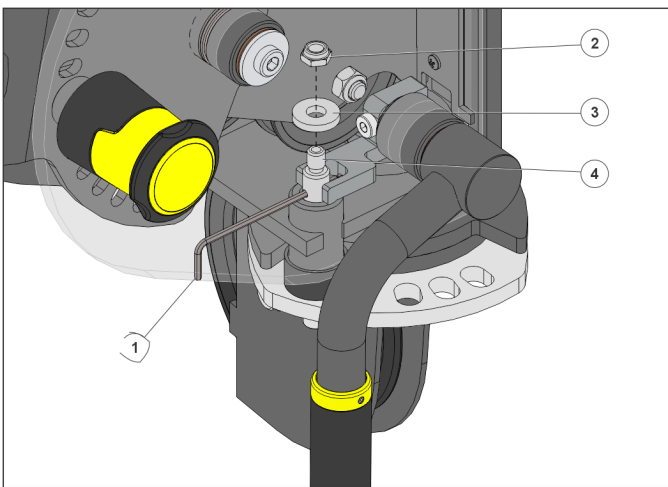
Item	Description	Qty.
1	Pull Pin Housing	1
2	Bumper Sleeve	1

5. Insert the spring, pull pin into the carriage, then fasten the selector plate with its hardware and **tighten to 40-45 ft-lbs/54.2-61.0 Nm.**



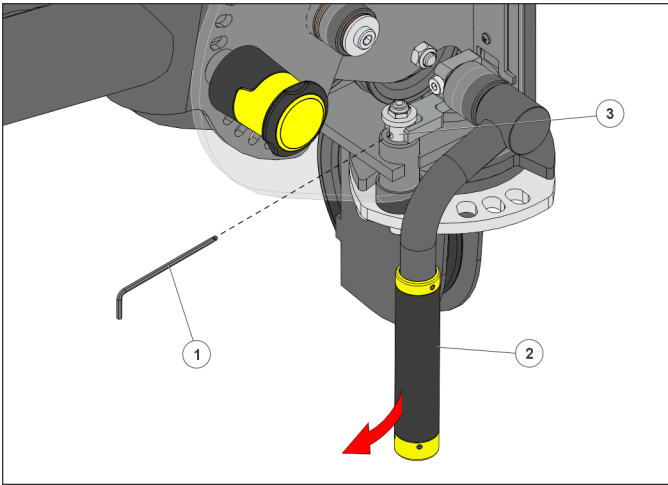
Item	Description	Qty.
1	Carriage	1
2	Spring	1
3	Pull Pin	1
4	Selector Plate	1
5	3/8 Washer	3
6	M10 x 1.5 x 30mm Screw	3

6. Holding the pull pin in place with the hex wrench, replace the pull pin hardware and **tighten to 20-29 ft-lbs/ 27.1-39.3 Nm.**



Item	Description	Qty.
1	3mm Hex Wrench	1
2	3/8-16 Nylock Nut	1
3	25mm OD Washer	1
4	Pull Pin	1

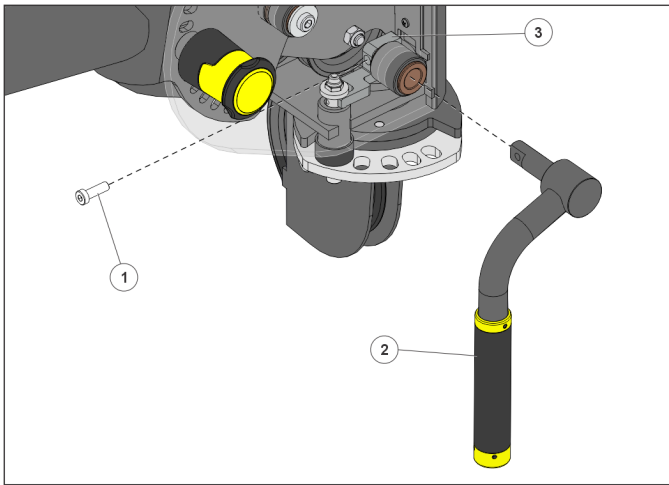
7. Lift release handle in order to remove the hex wrench (similar tool) from the pull pin.



Item	Description	Qty.
1	3mm Hex Wrench	1
2	Pull Pin	1
3	Release Handle Assembly	1

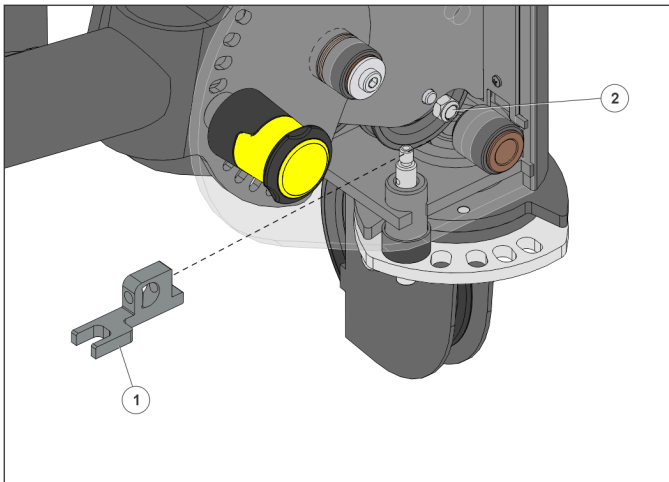
## Release Handle Replacement

1. Loosen and remove the M8 x 1.25 screw, then remove the release handle assembly from the carriage.



Item	Description	Qty.
1	M8 x 1.25 Screw	1
2	Release Handle	1
3	Carriage	1

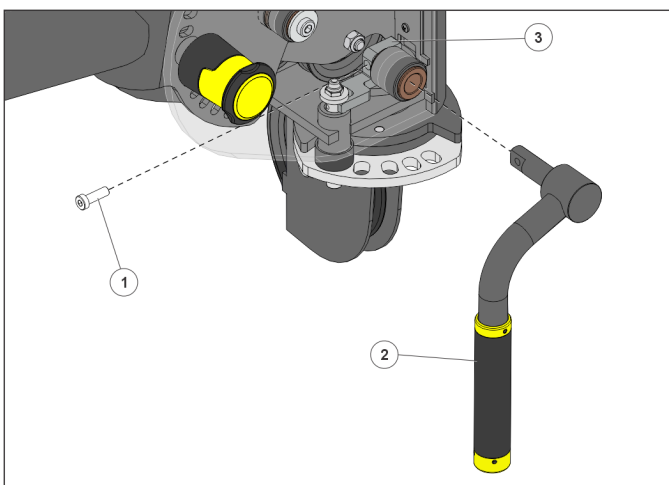
2. Check and replace the pivot lever at this time if needed.



Item	Description	Qty.
1	Pivot Lever	1
2	M10 Nylock Nut	1

**NOTE:** Item 2 can be removed to gain more space.

3. Replace the release handle and its hardware and **tighten to 20-29 ft-lbs/ 27.1-39.3 Nm.**



Item	Description	Qty.
1	M8 x 1.25 Screw	1
2	Release Handle	1
3	Carriage	1

# 5. Cable Handling Guide

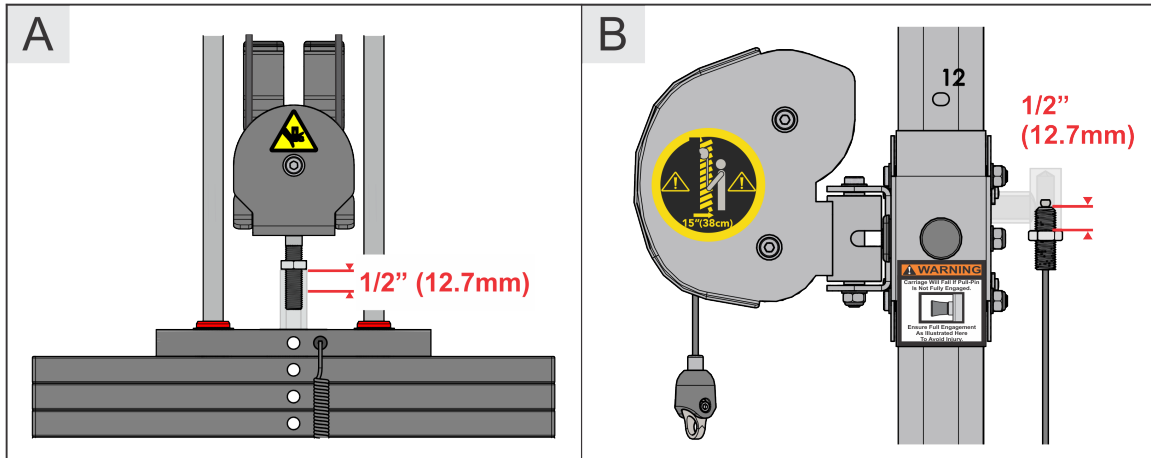
## Cable Terminations, Tensioning and Wear Guide

Cable connections with threaded cable ends are required to be installed and maintained following the specifications identified below. Failure to follow these specifications can lead to the dislocation of the threaded cable during use and can cause serious injury. Along with securing the threaded cable end and jam nut, it is important to check the entire unit and ensure that all hardware is securely fastened and not left loose upon completion of cable installation.

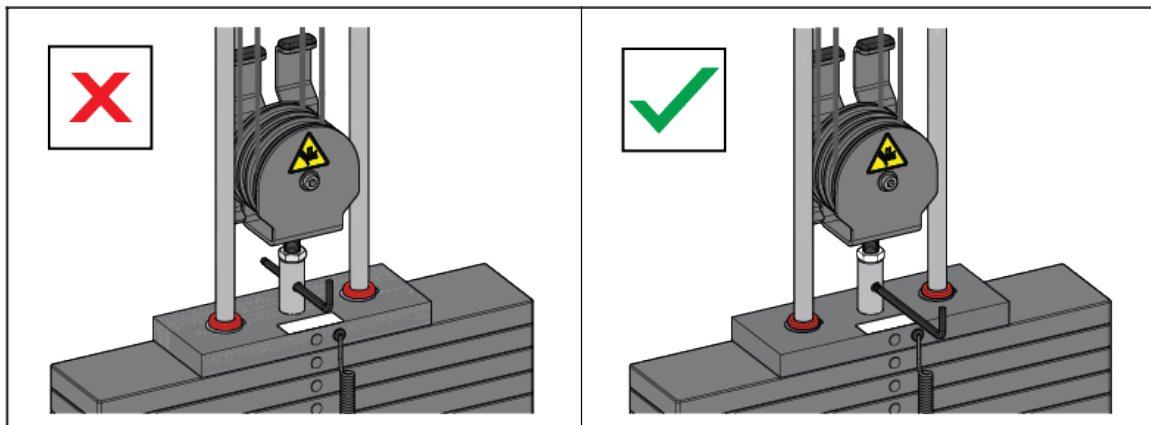
**⚠ WARNING:** Use of non certified “techs” note: Service warranties may be void if a non-Life Fitness-certified technician performs service work. Replacement of any strength cables should be performed by a Life Fitness certified technician.

### Cable Terminations

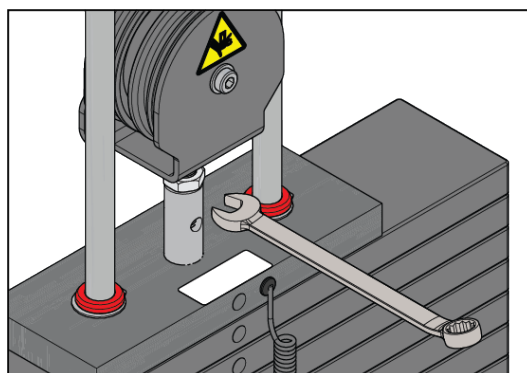
1. Cable must be threaded at least 1/2 inch (12.7mm) into termination points; at headplate (A) and frame/carriage (B).



2. Certain models are now equipped with a bayonet portal to assist checking proper thread engagement. To do so, attempt to pass a 7mm Allen wrench through the portal, if it goes through, more threads are needed to meet the minimum requirement.



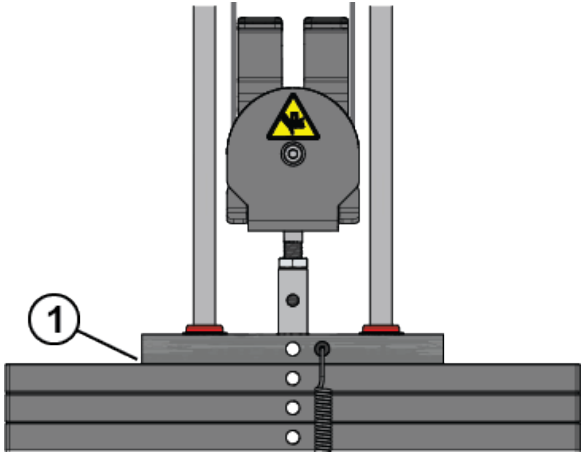
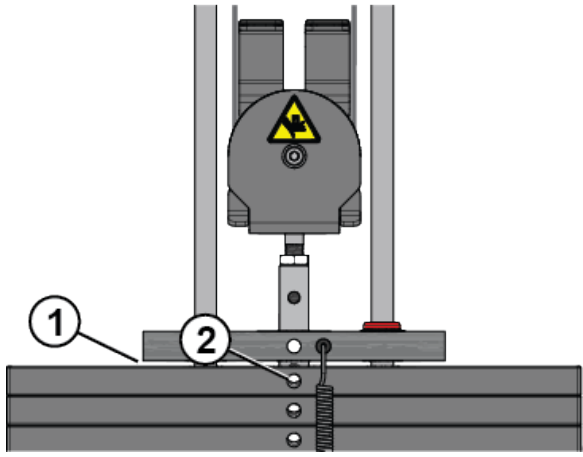
3. When proper thread engagement is reached, tighten jam nut to 20-25 FT-LBS (27.2 - 34.0 Nm) using a 24mm wrench.



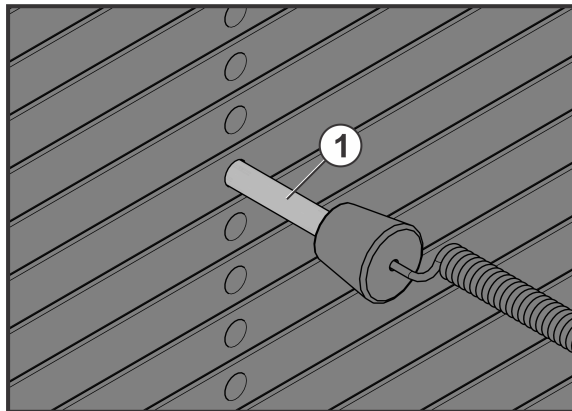
## Tensioning Cable

Cable should have enough tension so it stays seated into the pulley but not so tight that it pulls the head plate off the weight plate below it.

1. If the head plate has lifted, loosen the jam nuts at the terminations and loosen the threaded plugs a half turn until the head plate comes to rest on the weight plate below. Check that the cable's threaded plugs are engaged at least 1/2" (12.7mm) at each termination point.

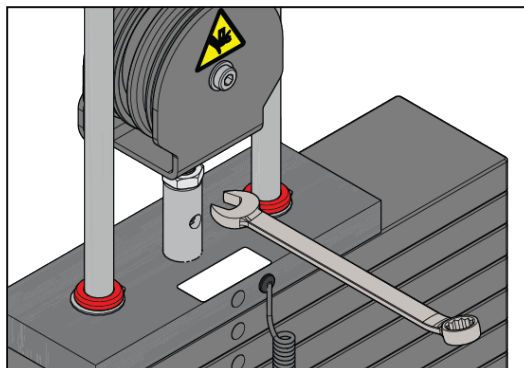
SEATED HEAD PLATE	SUSPENDED HEAD PLATE
	
<p>1. No gap</p>	<p>1. Gap 2. Bayonet obstructing weight stack pin</p>

2. Ensure that the weight stack selector pin can fully engage into each weight plate.



Item	Description	Qty.
1	Weight Stack Selector Pin	1

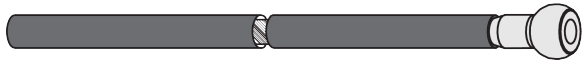
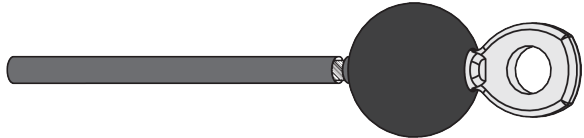
3. When proper thread engagement is reached, tighten jam nut to 20-25 FT-LBS (27.2 - 34.0 Nm) using a 24mm wrench.




## Strength Cable Wear Guide

Replace cable at first sign of any of the following:

### FRACTURES:

<p>Casing can crack or fracture under strains during use. Any crack in the casing merits cable replacement even if no wire rope is exposed.</p>	
<p>Be especially observant for fractures near the components on the cable assembly - IE. Nylon Ball, Nico Loop, Threaded Plug, etc.</p>	


### TWISTING/BINDING:

<p>Inspect casing to ensure wire rope is not twisting within its casing. Any sign of the cable twisting should be replaced immediately.</p>	
---	--

### BULGING:

<p>Internal wire rope strands can break within and coil causing a bulge to appear. Cable should retain same outside diameter throughout.</p>	
--	--


### FRAYED/EXPOSED WIRE ROPE:

<p>Any exposed wire rope protruding through the casing or at either end.</p>	
--	--


### FLATTENED:

<p>Section of cable is compressed and will not retain its shape (outside diameter).</p>	
---	--

### PERMANENTLY BENT:

<p>Cable has 'kink' and prohibits cable from laying straight. Wire rope may be unraveling beneath casing and is compromised warranting replacement.</p>	
---	--

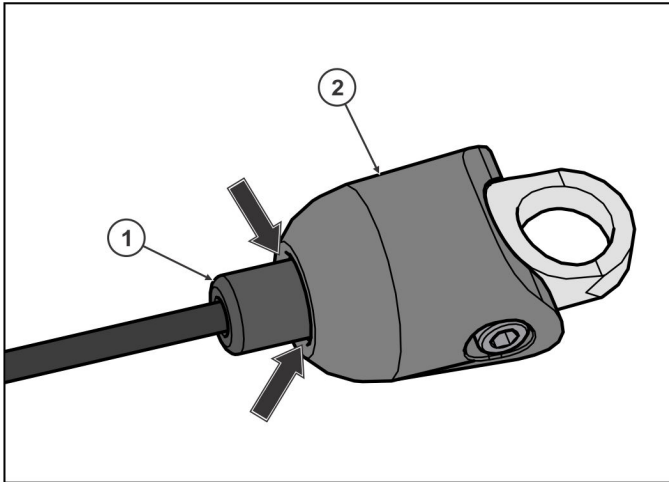
### ENDS SEPARATING:

<p>Watch for component end of cable to pull away from cable assembly - look for exposed wire rope.</p>	
--	--

## Insert Inspection

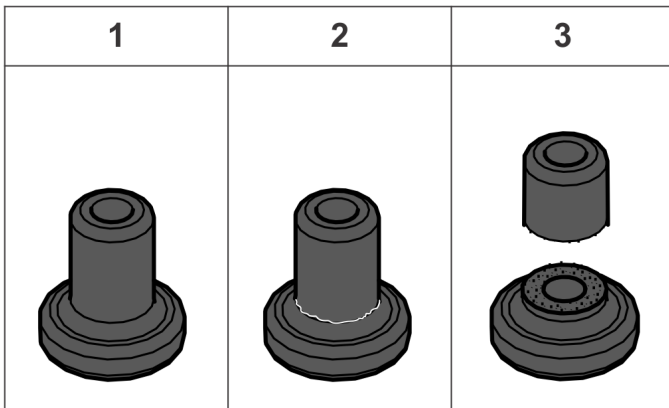
Inspect insert within the strain-relief cable end assembly and replace if any sign of damage.

1. Check around plastic insert and the plastic housing for any excessive wear or damage.



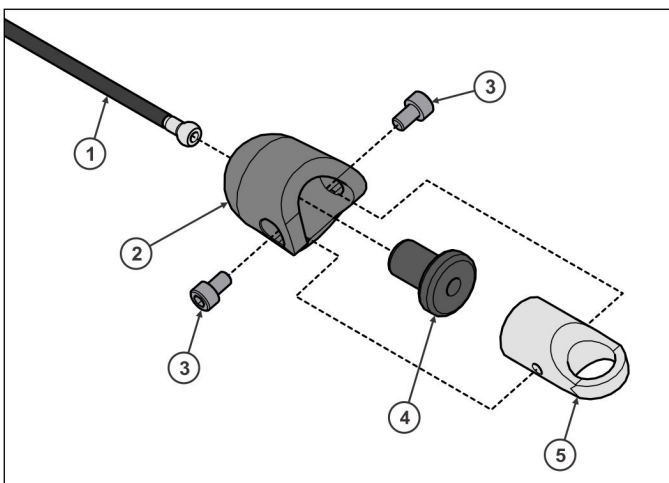
Item	Description	Qty.
1	Plastic Insert	1
2	Plastic Housing	1

2. Replace plastic insert if cracked, torn, separated, overly worn or damaged in any way.



Item	Description	Status
1	Insert - No damage	Use
2	Insert - Cracked	Replace
3	Insert - Separated	Replace

3. Using a 4mm hex wrench, remove screws from the housing/link and the damaged insert from cable assembly. Replace damaged insert, reassemble components and **tighten to 8-10 in-lbs (0.9-1.1 Nm)**.



Item	Description	Qty.
1	Cable Assembly	1
2	Housing	1
3	Screw; M5 X 0.8 HXS SOC	2
4	Insert	1
5	Link	1

# 6. Bolt to Floor Guide

## Introduction

Life Fitness designs its products to be stable when used as designed. Because strength training is dynamic, we cannot predict how users will ultimately use the products in all circumstances. Therefore, Life Fitness **recommends** that strength training equipment be secured to a solid, level surface to stabilize and eliminate rocking or tipping over.

Each new unit shipped comes with a multi-language hangtag stating the importance of bolting the unit down as a safety precaution.

It is the facility's responsibility to adhere to local and regional building codes.

## Delivery and Installation Tips

### All Anchors

- Fasteners must have minimum embedment in concrete floor, not including screed, regardless of wood/tile/rubber over sub-floor. (See *Anchor Types* for maximum sub-floor thickness between unit and concrete to equipment foot must be made of flooring or other material (i.e. no air gaps)).
- DO NOT reuse fasteners. Static and Dynamic anchors are designed for one-time use only.
- Factor in equipment's feet height when selecting fastener length.
- Factor in flooring thickness when selecting fastener length.
- It is also recommended to drill an additional 1/2" (12.7 mm) of depth beyond the length of the fastener being used to ensure that debris does not block the entry of the anchor.
- Minimum concrete compressive strength: 3000 psi (20 N/mm<sup>2</sup>).

### Anchoring

- All anchors must have a minimum embedment into concrete, regardless of wood/tile/rubber/screed over sub-floor.
- Dynamic anchors must have a minimum embedment depth in concrete to ensure maximum security and pull out force. See *Anchor Types* for embedment depth minimums.

### Building Codes

It is the facility's responsibility to adhere to local and regional building codes. Please verify with the customer to ensure that they are aware of this.

### Carpeting

If bolted down to carpet flooring, be sure to use a box cutter knife to cut the carpet threads around each foot. This will help avoid the carpet threads from being wrapped around and pulled by the drill bit.

### Competitor Product

The bolt down guidelines and procedures for Life Fitness products were determined by the company's Engineering and Installation Development groups. These guidelines include which anchors to use and positioning of the anchors are required for Life Fitness product.

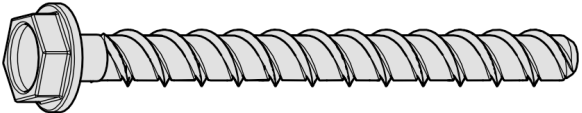
- Life Fitness does not have that level of specification or engineering input for competitive product.
- Life Fitness installation teams are not permitted to anchor competitor equipment.

### Drilling

It is also recommended to drill an additional 1/2" (12.7 mm) of depth beyond the length of the fastener being used to ensure that debris does not block the entry of the anchor.

- This can be done by marking your drill bit with a piece of tape.
- While it is recommended that a vacuum be used to clean up debris, this will not account for all the debris that will settle at the bottom of the drilled hole.

### Anchor Type - Static

Static Anchor	Standard Sizes	Drill Bit Size
	Imperial: KH-EZ 3/8" x 5"	3/8in
	Metric: HUS-H 10mm x 130mm	10mm

## Anchor Specifications

Static Anchor	Minimum Concrete Thickness	Minimum Drill Depth in Concrete	Minimum Concrete Embedment	Minimum concrete compressive strength
KH-EZ 1/4"	4-1/8" (105mm)	1/2" (12.7mm) beyond anchor length	2-1/2" (63.5mm)	3000psi (20 N/mm <sup>2</sup> )
HUS-H 6mm	3-3/32" (100mm)	25/64" (10mm) beyond anchor length	2-1/64" (55mm)	3000psi (20 N/mm <sup>2</sup> )

## Pullout Force

Life Fitness specifies Hilti™ static and dynamic anchors. According to the anchor manufacturer, the recommended design pullout force (in tension) for the specified anchors, when properly installed in cracked concrete, is provided in the side table. This table should be used for reference only; for additional and up-to-date information on the anchor capabilities or the design pullout force in other substrates, please consult Hilti directly at <https://www.us.hilti.com>.

Selected Anchor	Design Resistance in Tension *
KH-EZ 1/4" x 4"	830 lb
HUS-H 6MM x 120MM	3.3 kN
KH-EZ 3/8" x 4"	1535 lb
KH-EZ 3/8" x 5"	1535 lb
HUS-H 8MM x 120MM	3.3 kN
HUS-H 8MM x 150MM	3.3 kN
HSL-3 and HSL4 M 8/40	2000 lb
HST M12 x 115/20	8 kN
HST M12 x 195/200	8 kN
KB-TZ 3/8" x 3-3/4"	1615 lb

\* Design strength extracted from the Hilti Anchor Fastening Technology Manual.

## Tools Required

**⚠ WARNING:** Adhere to manufacturer's equipment warnings and guidelines. Follow manufacturer's instructions for proper usage.

- 1" L-shape SDS rotary hammer
- (Imperial anchors) 3/8" diameter carbide drill bit
- (Metric anchors) 10mm diameter carbide drill bit
- Extension cord
- Floor scanner / rebar detector (optional)
- Hammer (Dynamic anchors only)
- Rotary tool
- Safety glasses
- Tape measure
- Torque wrench
- Vacuum (for debris)

## Static Anchor

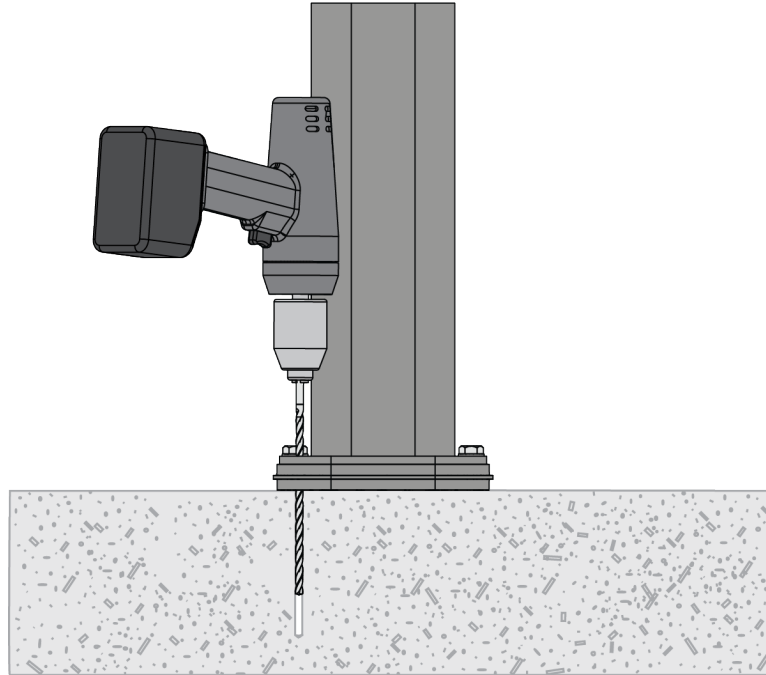
- Floor scanner / rebar detector (optional)
- 1" L-shape SDS rotary hammer
- 1/4" x 12" / 6 mm x 305 mm carbide drill bit (for 1/4" (6mm) anchors)
- 3/8" x 12" / 8 mm x 305 mm carbide drill bit (for 3/8" (8mm) anchors)
- Safety glasses

- Extension cord
- Impact wrench
- Vacuum (for debris)

## Static Anchor Procedure

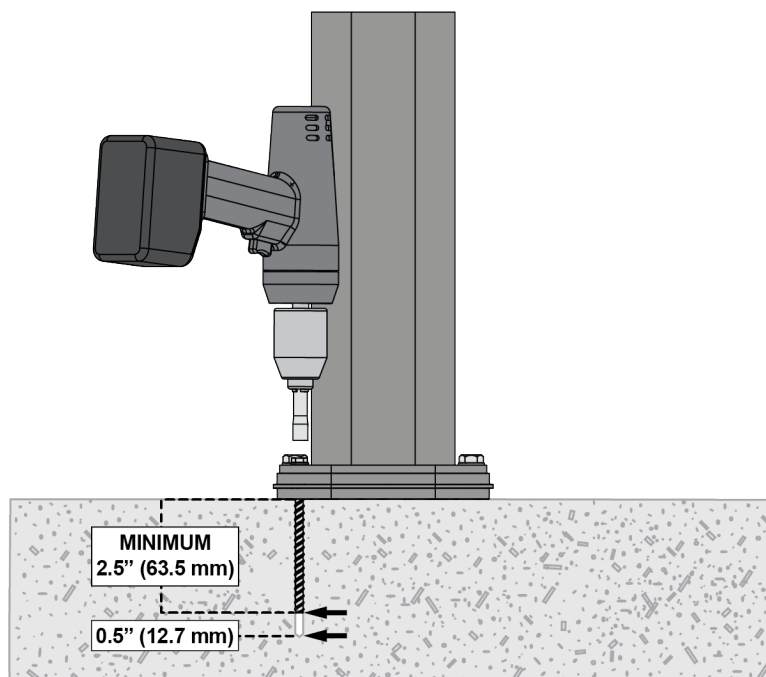
**⚠ CAUTION:** If it is possible that the length of your bolt will not provide the minimum requirement of 2.5" (63.5mm) of engagement, a longer anchor should be used.

1. Place unit into position to be mounted and cycle unit to set stance.
2. Each foot **must** get at least one static fastener.
3. Wearing protective glasses, drill down into the flooring to the required depth as perpendicular as possible, ensuring that the foot thickness is being accounted for; refer to *Anchor Selection* and *Foot Dimensions*.



4. Insert fastener and tighten to 18 Foot-Pounds (24Nm) for 1/4" (6mm) anchor or 40 Foot-Pounds (54Nm) for 3/8" (8mm) anchor.

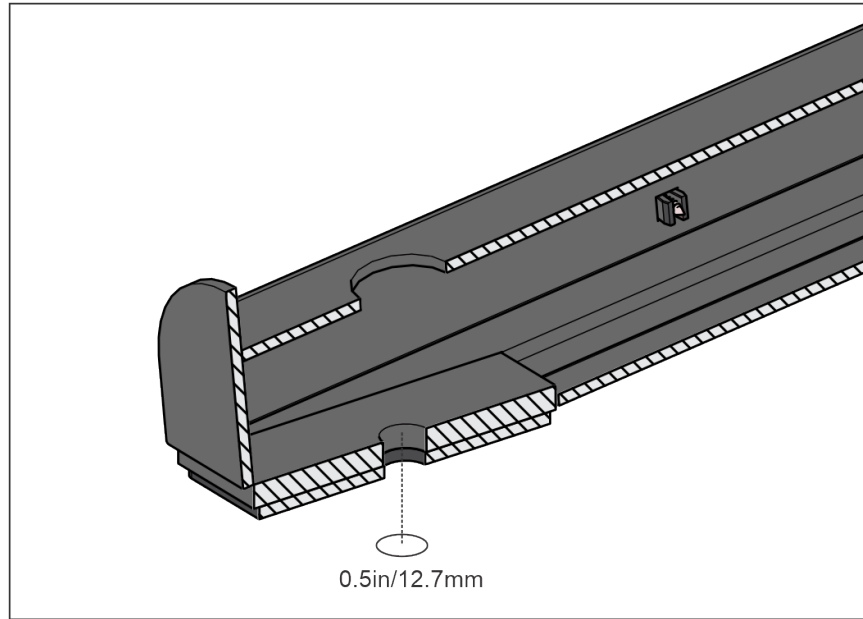
**NOTE:** If the legs/frame do not contact the mounting surface **DO NOT** pull down with the fastener or anchor. Loosen frame hardware and re-tighten to allow machine to align.



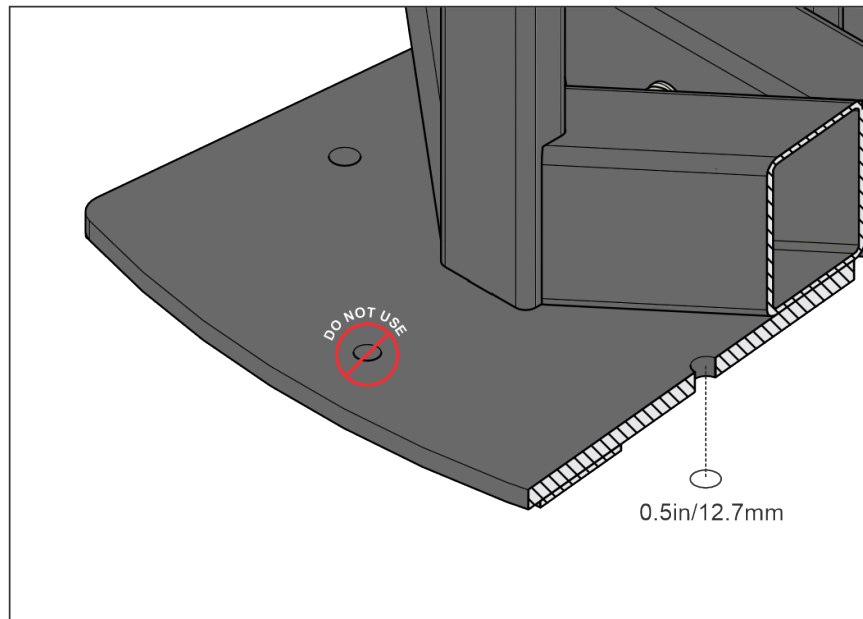
## Foot Dimensions

Use below images to determine foot specifications.

### Foot Brace



### Rear Foot Plate



**NOTE:** Do not use the center hole for anchoring.









1029005-0001