

SURGICAL C-ARM TABLE - 846

INSTALLATION/ OPERATION MANUAL

058-846

058-847



BIODEX

BiodeX Medical Systems, Inc.

SURGICAL C-ARM TABLE - 846



This manual covers installation and operation procedures for the following products:

- #058-846 Table, Surgical C-Arm - 846, 115 VAC
- #058-847 Table, Surgical C-Arm - 847, 230 VAC

Symbol	Meaning
	<i>CAUTION: Refer to instruction manual before operating or servicing system.</i>
	<i>ATTENTION: Se référer à la notice d'utilisation avant d'utiliser l'équipement.</i>
	<i>CAUTION: Disconnect power from source before removing panel or covers. Reliable grounding achieved only by connecting this unit to an equivalent marked hospital only or hospital receptacle.</i>
	<i>ATTENTION: Déconnecter la prise secteur avant d'ouvrir le coffret. Une terre fiable ne peut être obtenue que par la connexion à une prise secteur de qualité hospitalière.</i>

INTRODUCTION

The Surgical C-Arm Table – 846 features an economical, no-nonsense float top design that allows for quick and comfortable patient positioning. Its large radiolucent area, motorized actuation of height and free-float X-Y tabletop make it ideal for both pain care and cardiovascular applications. The tabletop's innovative contour combines the advantages of square and contoured tabletops, offering additional space at the head-end of the table while enabling the user to get the C-Arm close to the cervical spine for greater image resolution.

Designed for procedures where stability, access and precise, quiet, vibration-free positioning are essential, this table's functional design allows complete access with reduced radiation exposure to clinicians. Patient comfort and stability are assured by two-inch thick table padding and three adjustable straps with Velcro® hook and loop fastening. A face cutout is provided for prone positioning.

NOTE: The 058-846 and 058-847 tabletop is made of carbon fiber. This material, as used in this product, is certified to meet all the requirements of radiation performance standards of 21 CFR Subchapter J.



Figure 1 - Parts and adjustment mechanisms.

1. Hand-Held Controller
2. Free-Float X-Y Tabletop Release Button
3. Foot End Locking Brakes and Swivel Casters
4. Front End Caster Brake Locking Bar

OPERATING INSTRUCTIONS



CAUTION: Refer to instruction manual before operating or servicing system.



ATTENTION: Se référer à la notice d'utilisation avant d'utiliser l'équipement.



CAUTION: Hospital grade plug to be plugged into a hospital grade receptacle only to achieve grounding reliability.



ATTENTION: La fiche de qualité hôpital ne doit être branchée que sur une prise de courant de qualité hôpital, pour une mise à la terre fiable.



CAUTION: Before transferring a patient onto or off the table, ensure all four caster brakes are locked. Secure the restraining straps immediately after positioning the patient on the table.



ATTENTION: Avant le transfert du patient sur la table ou hors de la table, s'assurer que les quatre freins des roulettes sont bloqués. Fixer les lanières d'immobilisation dès qu'on a positionné le patient sur la table.



CAUTION: The restraining straps are not intended to restrain an uncontrolled patient.



ATTENTION: Les lanières d'immobilisation n'ont pas pour objet l'immobilisation d'un patient hors de contrôle.

The Locking Brakes and Swivel Casters

(See Figure 2.)

The locking brakes and swivel casters allow this table to glide effortlessly on hard surfaces and across firm rugs. The foot end casters are locked from either side of the table while the head end casters are locked together using the Caster Brake Locking Bar.

1. To release the lock on the brakes and swivel casters at the foot end of the table, use your toe to lift up on the Foot End Caster Brake Locking Lever on either side of the table.
2. To lock the foot end brakes and swivel casters, step down on the Foot End Caster Brake Locking Lever on either side of the table.
3. To lock the brakes and swivel casters for the head end of the table, use your toe to press down on the Head End Caster Brake Locking Bar.
4. To release the head end brake and swivel casters, use your toe to lift up on the Head End Caster Brake Locking Bar.

NOTE: The Head End Caster Brake Locking Bar, when pressed down in the lock position, raises the head end casters slightly off the ground. The amount that casters are raised can be adjusted by simply using a 5/8" open-end wrench to adjust up or down the support foot located under the head end caster brake locking bar.

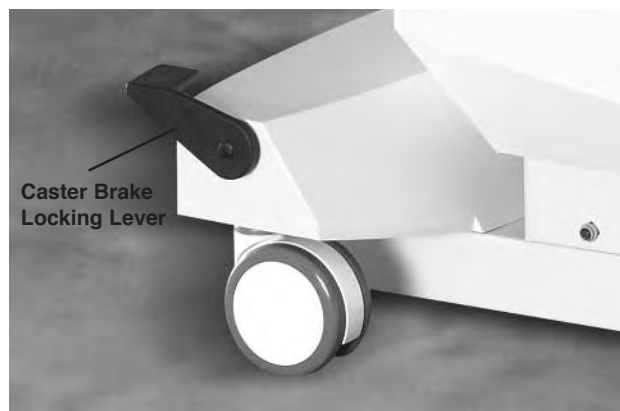


Figure 2. Foot End Caster Brake Locking Lever and casters.



Figure 3. Head End Caster Brake Locking Bar.

Using the Hand-Held Controller

The Hand-Held Controller may be used to adjust table height and X-Y positioning. When not in use, the Hand-Held Controller can be hooked onto the accessory rail.



CAUTION: Before moving the tabletop, be sure that all I.V. lines, attachments and restraining straps, etc., are out of the way. Ensure the patient is fully secured to the tabletop by the restraining straps.



ATTENTION: Avant tout déplacement du dossier, veiller à en dégager les lignes de goutte-à-goutte intravéneux, les accessoires, les lanières d'immobilisation, etc. S'assurer que le patient est solidement fixé au dossier à l'aide des lanières d'immobilisation.

To adjust the table position, press and hold the appropriate switch on the Hand-Held Controller. The tabletop will move in the direction indicated by the switch. Release the switch when the tabletop achieves the desired position.

NOTE: The table can perform only one motorized function at a time. If you press a second button on the Hand-Held Controller while the table is already performing a motorized function the tabletop movement will stop. At that point, you will need to release all buttons before you can resume the selected function.

NOTA: La table ne peut exécuter qu'un seul déplacement motorisé à la fois. Le fait d'appuyer sur un second bouton de la commande à main en cours de déplacement de l'appareil provoque l'arrêt du mouvement du dossier. Il faut alors relâcher tous les boutons avant de reprendre la fonction choisie.

Positioning The X-Y Free-Float Tabletop

(See Figure 4.)

The X-Y free-float tabletop is positioned using the red Tabletop Handgrip. The red handgrip has a push button that, when depressed, allows the table to move in both the X and Y planes. To move the tabletop, depress the push button on the red handgrip and slide the tabletop to the desired position. Release the button to lock the tabletop in place.

The Tabletop Handgrip may be positioned at any point along the accessory rail. You can position the grip in either a horizontal or vertical plane. To position the grip, loosen the handgrip locking knob, slide the grip to the desired position along the accessory rail, then tighten the locking knob to secure the grip.



Figure 4. Push button (on red handle) releases tabletop for free-float X-Y motion.

Catheter Tray Extension (Optional)

(See Figure 5.)

The removable Catheter Tray Extension can be used to provide additional table length for accommodation of catheters within the patient's sterile field. This makes the procedure easier, safer and reduces the risk of breaking the sterility of the catheters.



CAUTION: The Catheter Extension is not radiolucent and not suitable for patient support.



ATTENTION: L'extension du Cathéter n'est pas radiotransparent et ne pas convenable pour supporter un patient.

To attach the Catheter Tray Extension, simply hook the extension guides over the accessory rails at the foot end of the table and lower the extension into position.



Figure 5. Catheter Tray Extension.

I.V. Pole (Optional)

The adjustable height I.V. Pole should be installed onto the O.R. accessory rail. Loosen the I.V. Pole locking knob at the base of the slide block and slide the block and pole onto the accessory rail until it is in the desired position. Tighten the locking knob to secure the pole.

To adjust the height of the I.V. Pole, loosen the height adjustment locking knob and raise or lower the top section of the pole to the appropriate height. Tighten the locking knob to secure.



SAFETY GUIDELINES

1. Secure restraining straps immediately after placing the patient on the table. The restraining straps prevent the patient from rolling off the side of the table.

NOTE: The restraining straps are not intended to restrain an uncontrolled patient.

2. Always lock the casters before moving a patient onto or off the table.

3. This table is rated to support patients weighing up to a maximum of 500 pounds.



CONSIGNES DE SECURITE

1. Fixer les lanières d'immobilisation et les lanières de cheville immédiatement après avoir placé le patient sur la table. Les lanières de cheville empêchent le patient de glisser sous la table en position de Trendelenburg. Les lanières d'immobilisation empêchent le patient de rouler par-dessus le côté de la table.

NOTA: Les lanières d'immobilisation n'ont pas pour objet l'immobilisation d'un patient hors de contrôle.

2. Toujours bloquer les roulettes avant de faire monter le patient sur la table ou de le faire descendre.

3. La table est certifiée comme pouvant supporter un patient pesant au plus 227 kg (500 lb).

MAINTENANCE AND CLEANING

The Biodex Surgical C-Arm Table - 846 is virtually maintenance free. By following the instructions below at suggested time intervals, or as often as necessary, your table will remain in "like new" condition.

1. As required, clean all exterior painted surfaces, tabletop and restraining straps with a mild detergent solution.

2. Wheels and wheel locks should remain free of foreign materials and dirt accumulation. Keeping wheel assemblies free of this matter will ensure smooth table transportation and free lock/unlock wheel operation.



CAUTION: Disconnect power from source before removing panel or covers. Reliable grounding achieved only by connecting this unit to an equivalent marked hospital only or hospital grade receptacle.



ATTENTION: Déconnecter la prise secteur avant d'ouvrir le coffret. Une terre fiable ne peut être obtenue que par la connexion à une prise secteur de qualité hospitalière.

SPECIFICATIONS

Dimensions: 104" l x 26" w (260 x 66 cm) with OR accessory rails

Tabletop: 101" l x 24" w (252 x 61 cm)

Radiolucent Area:

51" l x 24" w (128 x 61 cm) unobstructed head to accessory rail

20" l x 17.5" w (50.8 x 44 cm) additional, between accessory rails

Radiolucent Area, Total Length: 71" l (178 cm)

Tabletop Material: Carbon Fiber with integral head section

Mattress: 2" thick (5 cm)

Attenuation:

Tabletop: .7 mm Aluminum equivalence

Mattress: .5 mm Aluminum equivalence

Motions:

Height: Adjustable from 33.5" to 43.5" (84 to 109 cm)

Tabletop X Motion (head-to-toe float): 20" (51 cm)

Tabletop Y Motion (side-to-side float): 10" (25.4 cm)

Controls:

Hand Control: height

Push Button: releases X-Y Tabletop motions

Wheels:

Head End – 3" (7.62 cm) swivel casters, integral locking system on base

Foot End – 5" (12.7 cm) swivel casters with central locking

Accessory Rails: Standard OR accessory rails

49.5" x 1.12" x .375"

(124 x 2.86 x .95 cm) mounted near foot end of table

Patient Restraints: Three body straps

Patient Load Capacity: 500 lb (227 kg); weight tested to four times the patient load capacity rating.

Power: 115 VAC or 230 VAC

Warranty: one year

Certifications: ETL and cETL listed to UL-2601-1®, CAN/CSA C22.2 No.: 601-1-M90 and EN 60601-1

058-846 Table, Surgical C-Arm - 846, 115 VAC

058-847 Table, Surgical C-Arm - 846, 230 VAC



OPTIONAL

058-848 Catheter Tray Extension (removable)

18" l x 24" w (45.7 x 61 cm)

Authorized European Community Representative:



Emergo Europe
Molenstraat 15
2513 BH, The Hague
The Netherlands

ELECTROMAGNETIC COMPATIBILITY CHART FOR:

#058-846/847

#058-870

#058-710/700/720

Test Type	Result		
	EN 61000-6-3	EN 61000-6-3	EN 60601-1-2 + EN 1970
Emission			
Mains terminal interference voltage	☐	☐	☐
Interference Current	☐	—	—
Radiated Electromagnetic Field	☐	☐	☐
Harmonic	☐	—	☐
Voltage Fluctuations	☐	—	☐
			☐
Immunity	EN 61000-6-1	EN 61000-6-2	EN 60601-1-2 + EN 1970
Immunity to electrostatic discharges	☐	☐	☐
Immunity to electromagnetic fields	☐	☐	☐
Immunity to fast electric transients	☐	☐	☐
Immunity to surges	☐	☐	☐
Immunity to conducted interference	☐	☐	☐
Immunity to 50 Hz Magnetic fields	☐	☐	☐
Immunity to voltage variations and short interruptions	☐	☐	☐
Variations of power frequency	☐	☐	☐

☐ Pass☒ Fail☐ Not applicable☐ No requirement

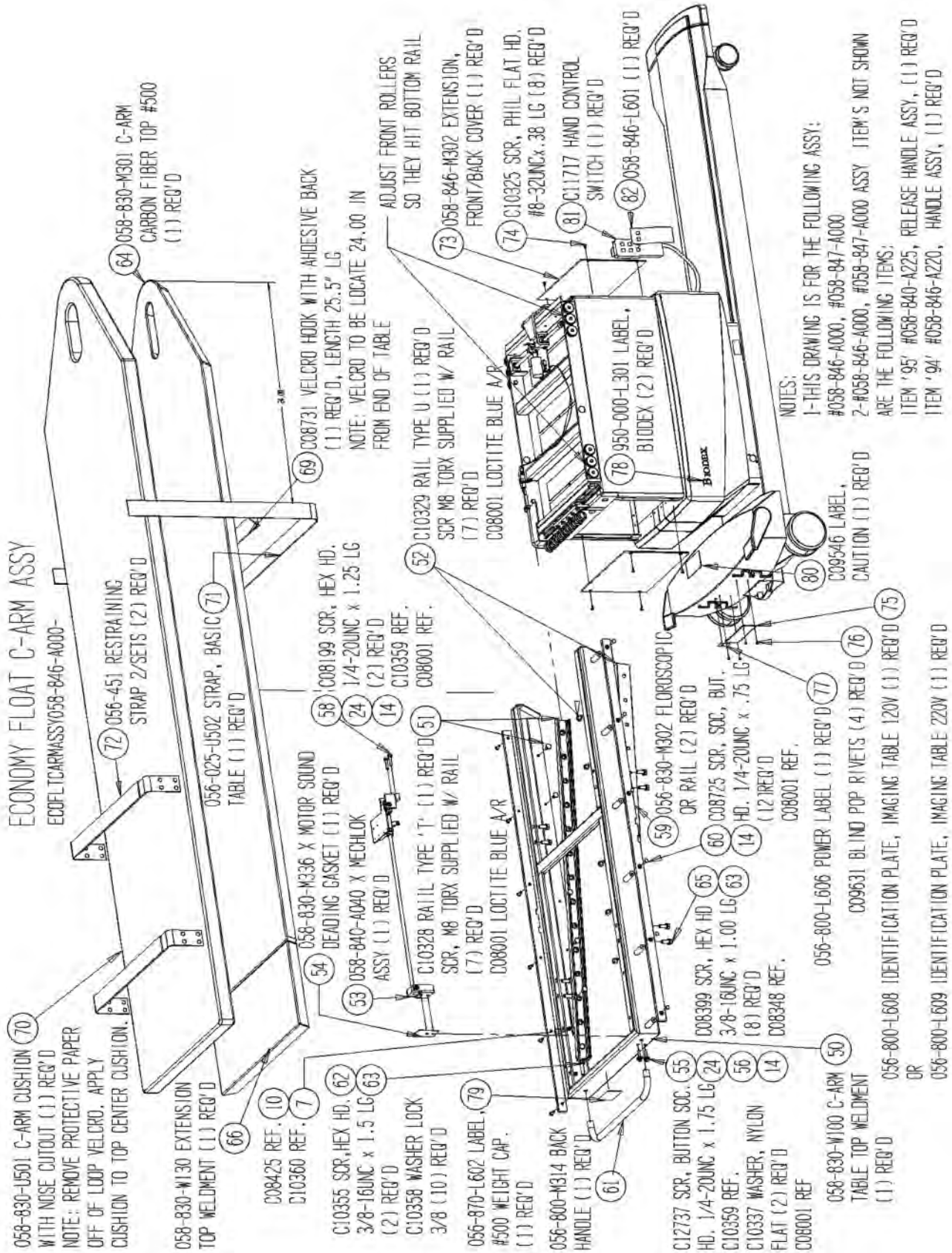
Magnetic Corp. control box. /Montena EMC SA

Date: 10/10/05

058-846 & 058-847 C-Arm Tables- dc methods test.doc :cs:dv

ECONOMY FLOAT C-ARM ASSY

ECDFLTARWASS/058-846-A000-

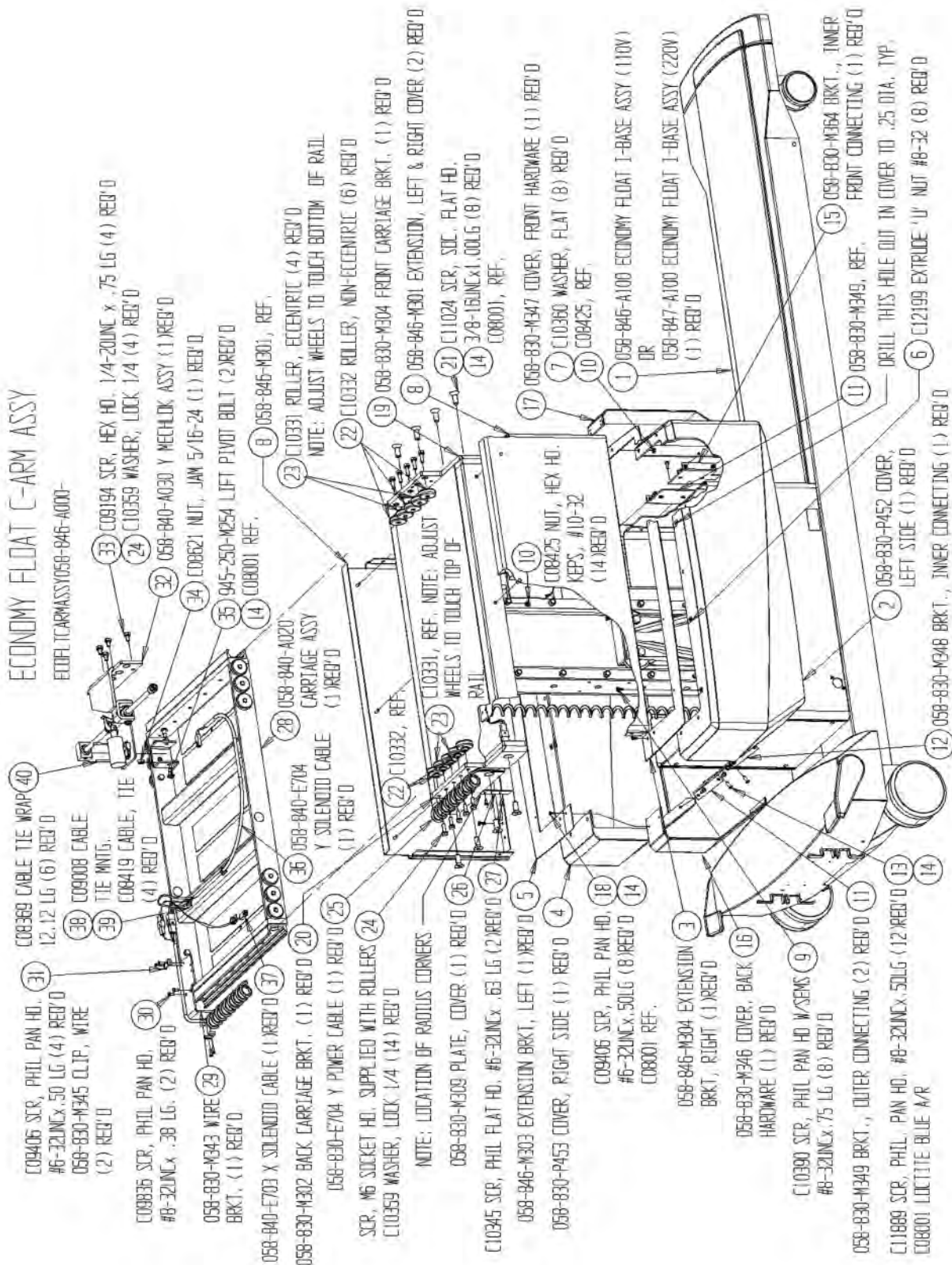


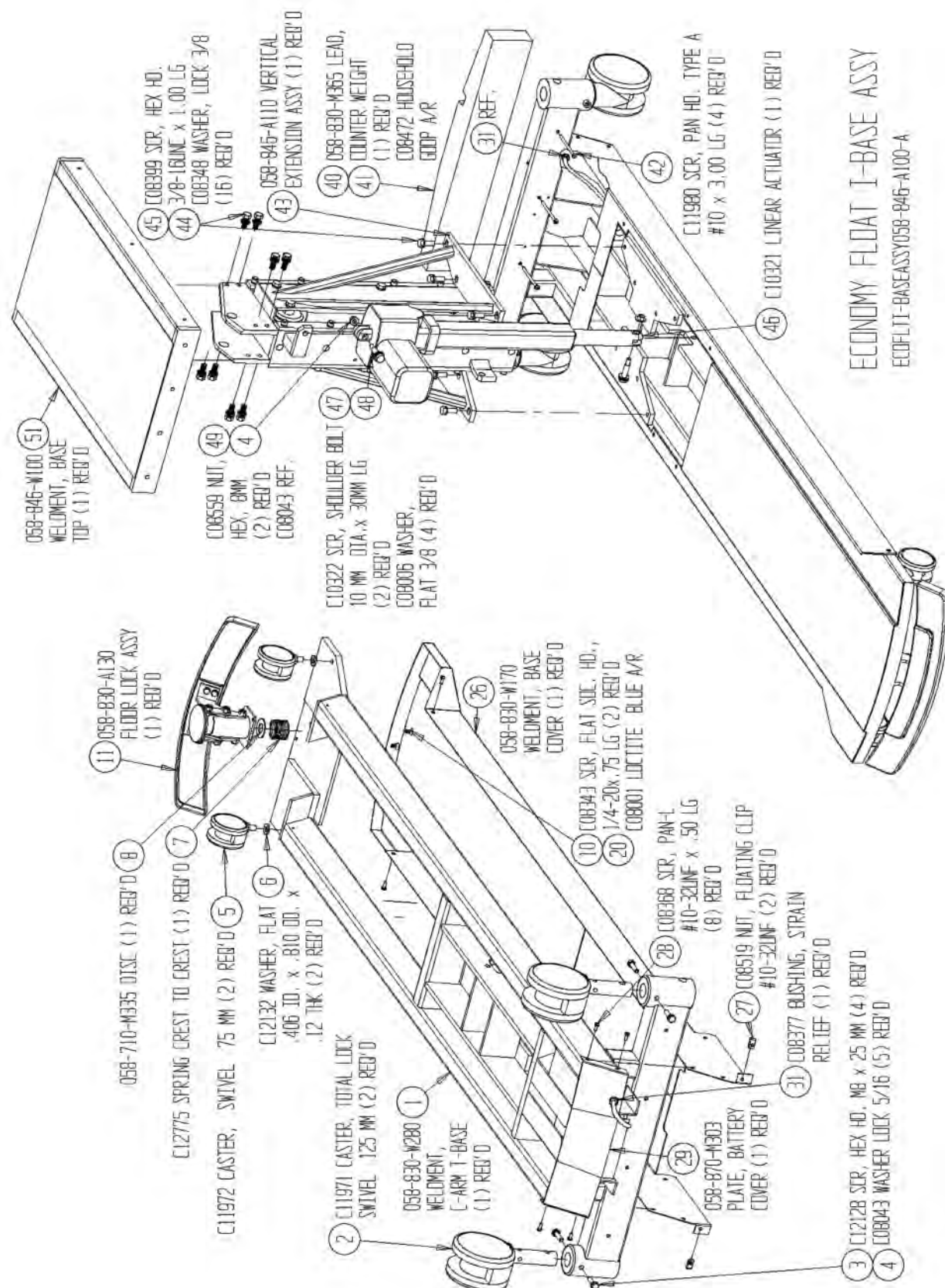
NOTES:

- 1-THIS DRAWING IS FOR THE FOLLOWING ASSY:
#058-846-A000, #058-847-A000
- 2-#058-846-A000, #058-847-A000 ASSY ITEM'S NOT SHOWN ARE THE FOLLOWING ITEMS:
ITEM '95' #058-840-A225, RELEASE HANDLE ASSY, (1) REQ'D
ITEM '94' #058-846-A220, HANDLE ASSY, (1) REQ'D

ECONOMY FLOAT C-ARM ASSY

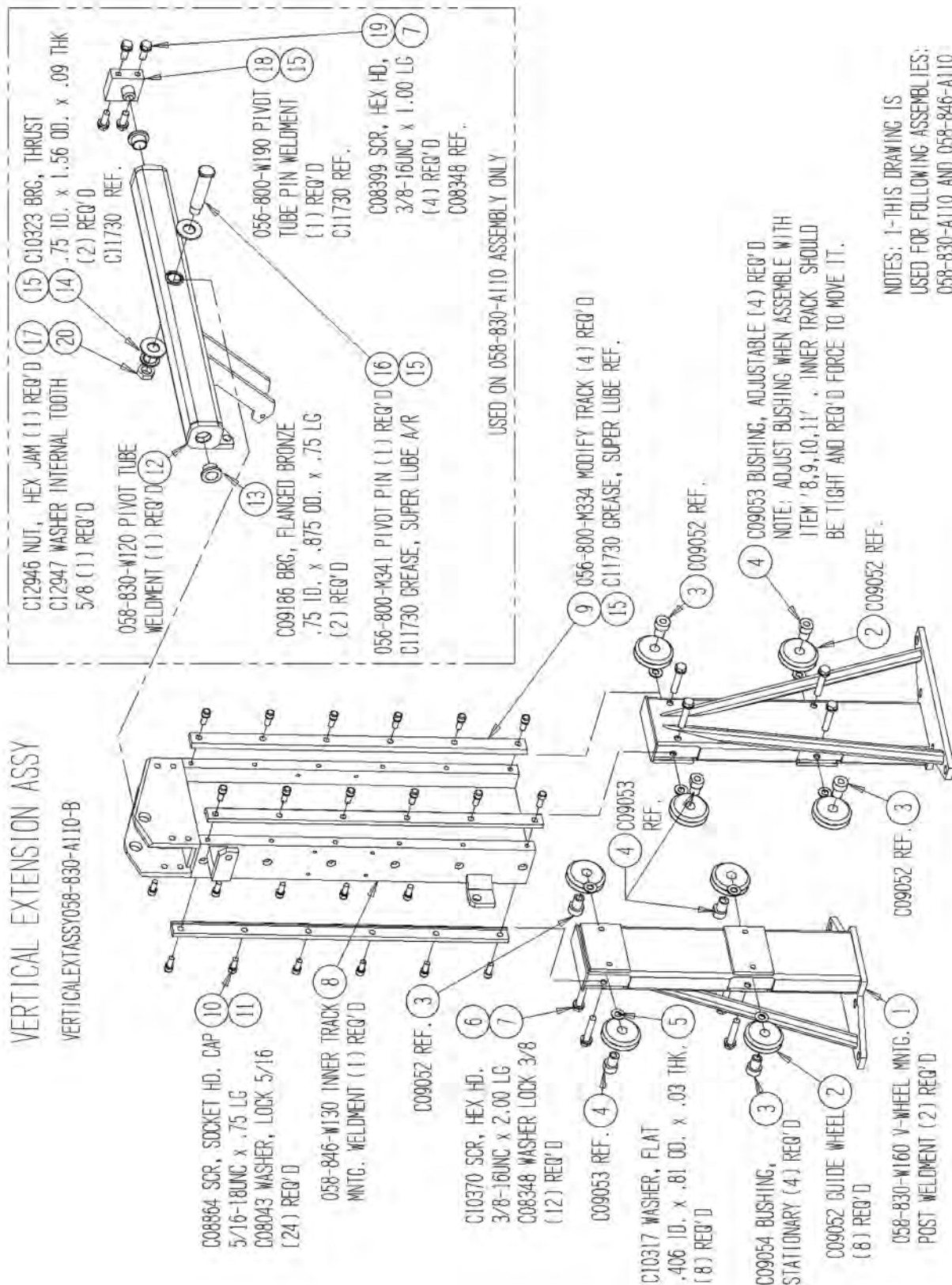
EDFLCARMASSY058-846-A000-





VERTICAL EXTENSION ASSY

VERTICALEXTASSY058-830-A110-B



CARRIAGE ASSY

CARRIAGE ASSY 058-830-A020-A

058-830-M327BRKT, MOTION Y MOTOR
MNTG (1) REQ'D FOR 058-830-A020

OR

058-840-M307 CLEVIS, Y-MOVEMENT
(1) REQ'D FOR 058-840-A020

(3) C10331 REF

(2) C10332 REF.

(9) C08001 REF

(8) C10330 RAIL, TYPE 'T' TYP.
(9) IN (2) PLCS SCR, M8 TORX
(12) REQ'D
C08001 LOCTITE BLUE A/R

NOTES: 1-THIS DRAWING IS
FOR THE FOLLOWING ASSY:
058-830-A020, 058-840-A020

(2) C10332 REF.
(3) C10331 REF

058-830-M328 Y MOTOR
SOUND DEADENING GASKET
(1) REQ'D

(2) C10332 ROLLER, NON-ECCENTRIC (8) REQ'D
(3) C10331 REF.

(1) 058-830-W250 X-Y CARRIAGE
WELDMENT (1) REQ'D

058-830-M386 SOUND DEADENING STRIP (6) REQ'D (14)
NOTE: CENTER IN PAN DO NOT COVER DRAIN HOLE

DO NOT TIGHTEN BOLTS
SHIM ADJUSTMENT IS REQ'D

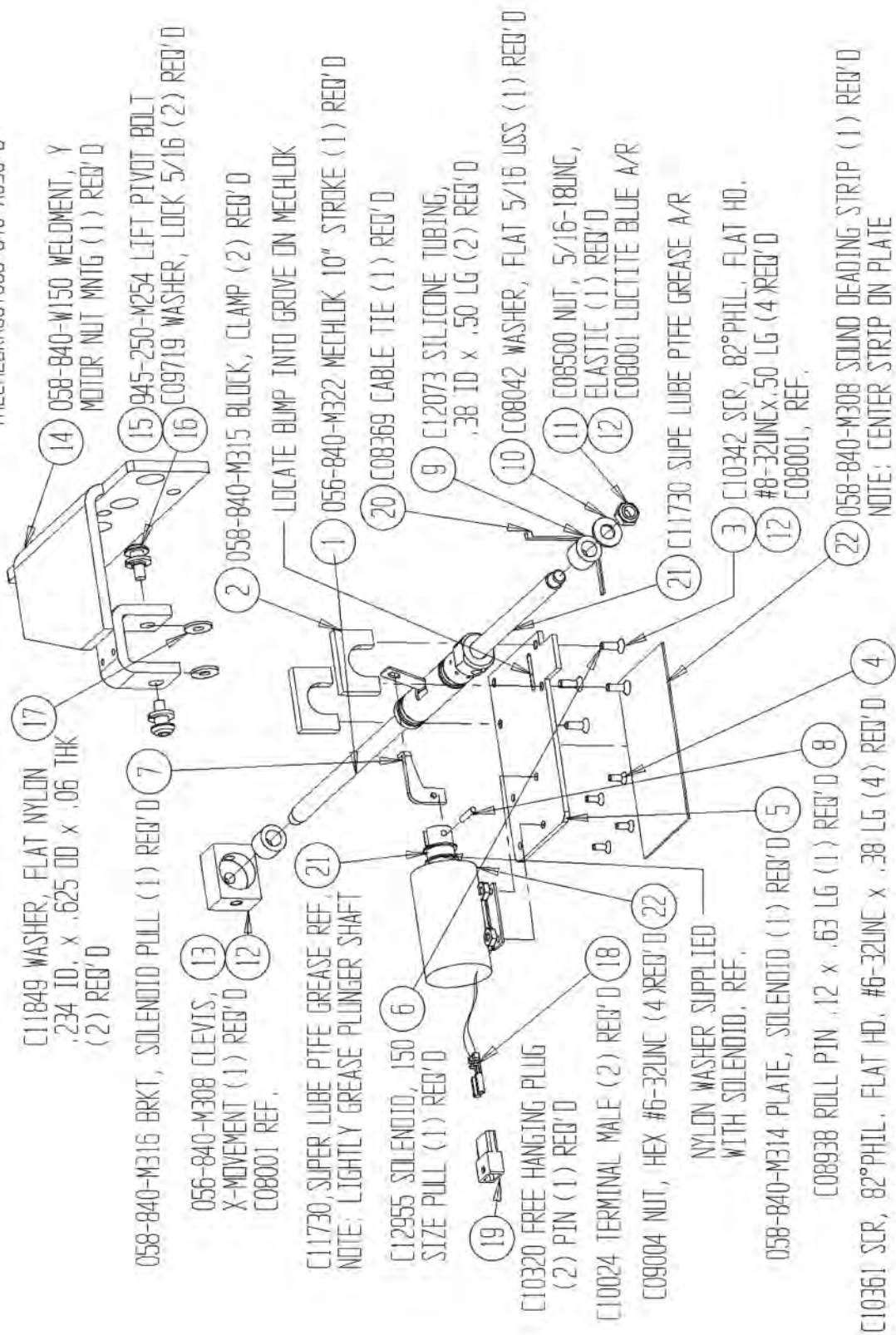
(2) C10332 REF.
(3) C10331 ROLLER,
ECCENTRIC (4) REQ'D

SCR, M6 SOCKET HD. SUPPLIED WITH ROLLERS (5)
C10359 WASHER, LOCK 1/4 (12) REQ'D

(10) 056-840-M350 SHIM, .015 THK X-Y CARRIAGE
(11) 056-840-M351 SHIM, .005 THK X-Y CARRIAGE
(12) 056-840-M352 SHIM, .002 THK X-Y CARRIAGE
(13) 056-840-M353 SHIM, .001 THK X-Y CARRIAGE
(2) REQ'D

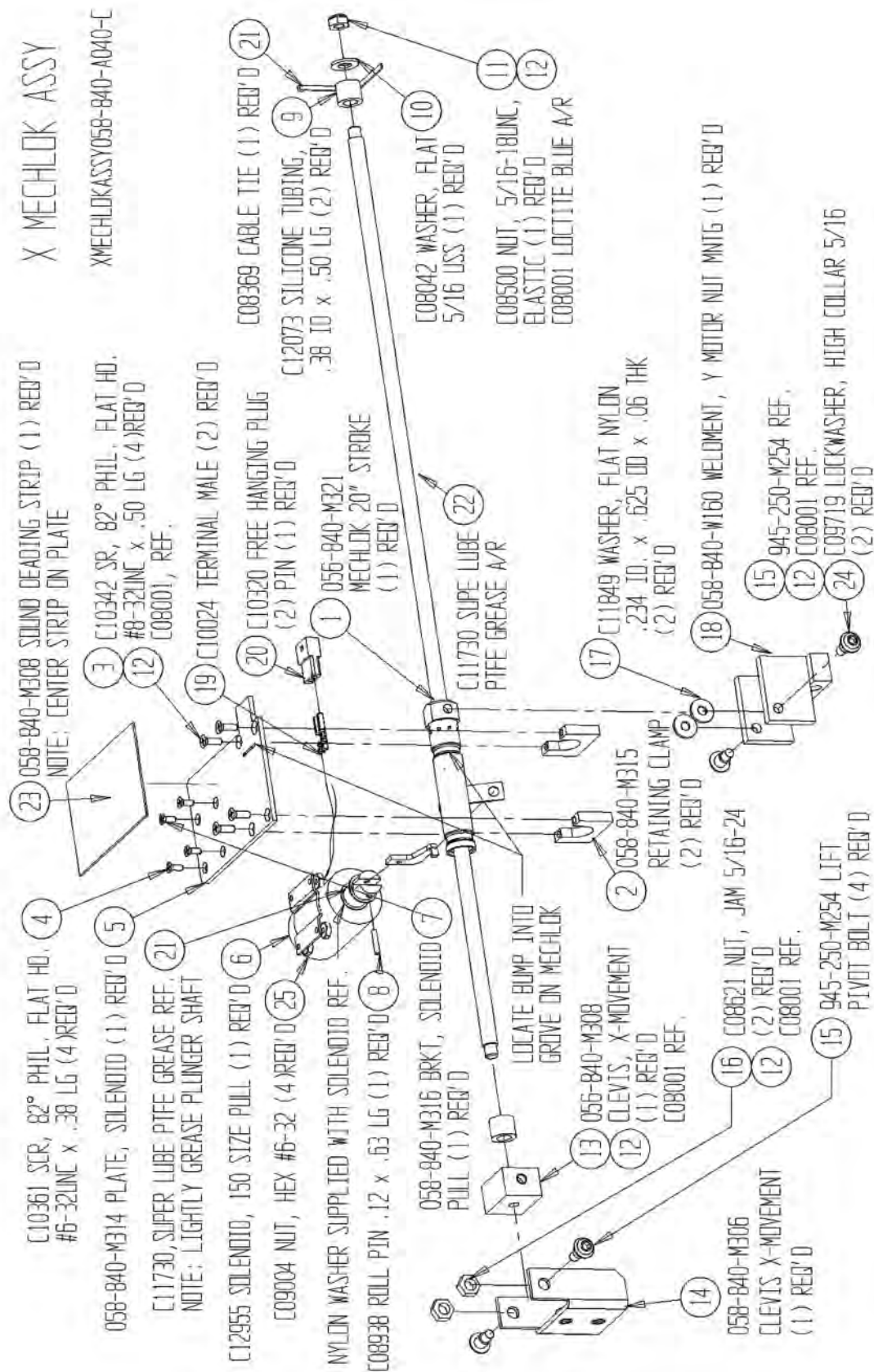
Y MECHLOK ASSY

YMECHLOK ASSY 058-840-A030-B



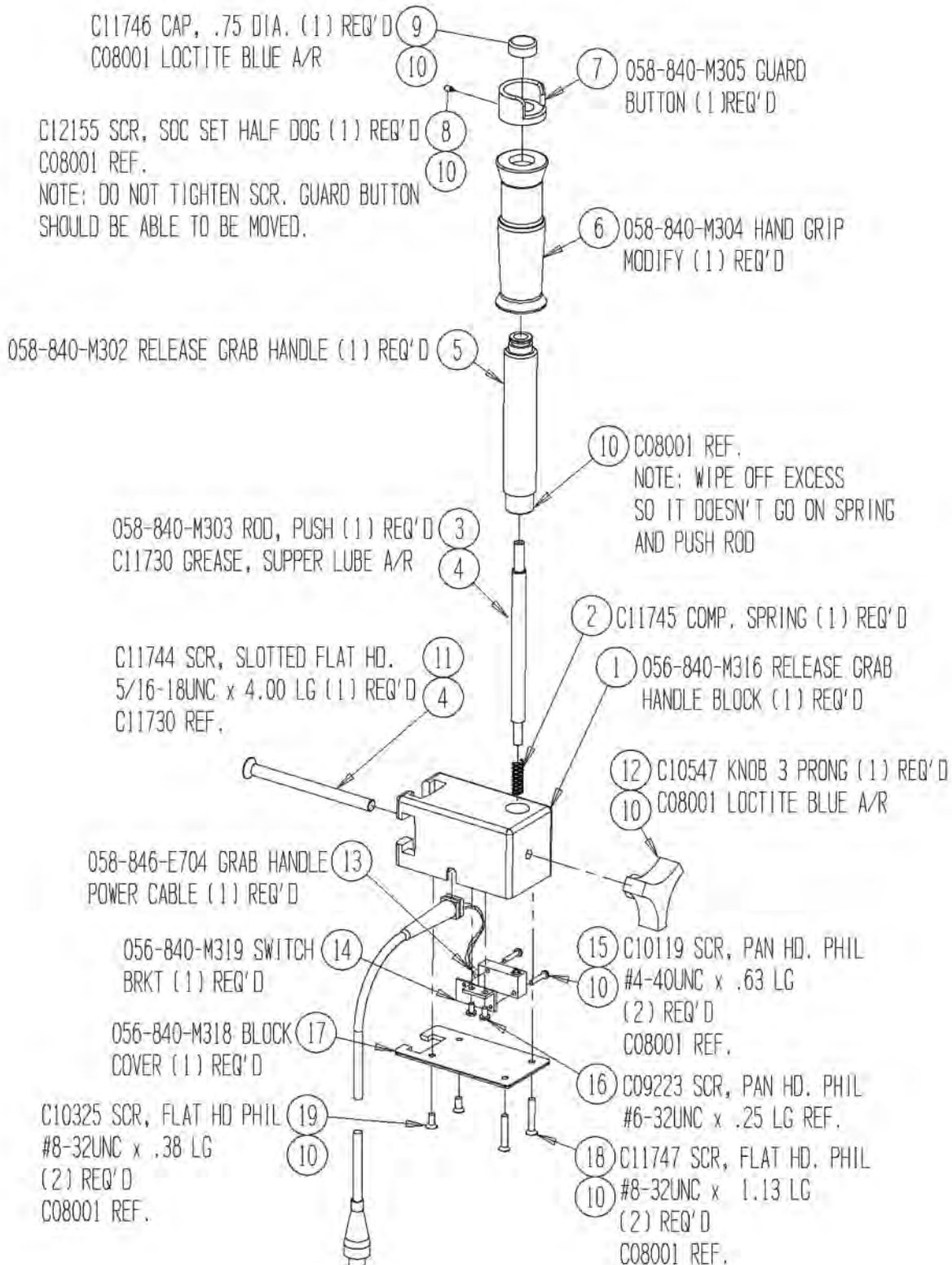
X MECHLOK ASSY

XMECHLOKASSY058-840-A040-C

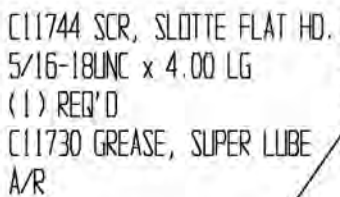


ECONOMY RELEASE HANDLE ASSY

ECORELHANDLEASSY058-846-A220-



HANDLEASSY058-840-A225-C



FLOOR LOCK ASSY.

FLOORLOCK ASSY 058-830-A130-

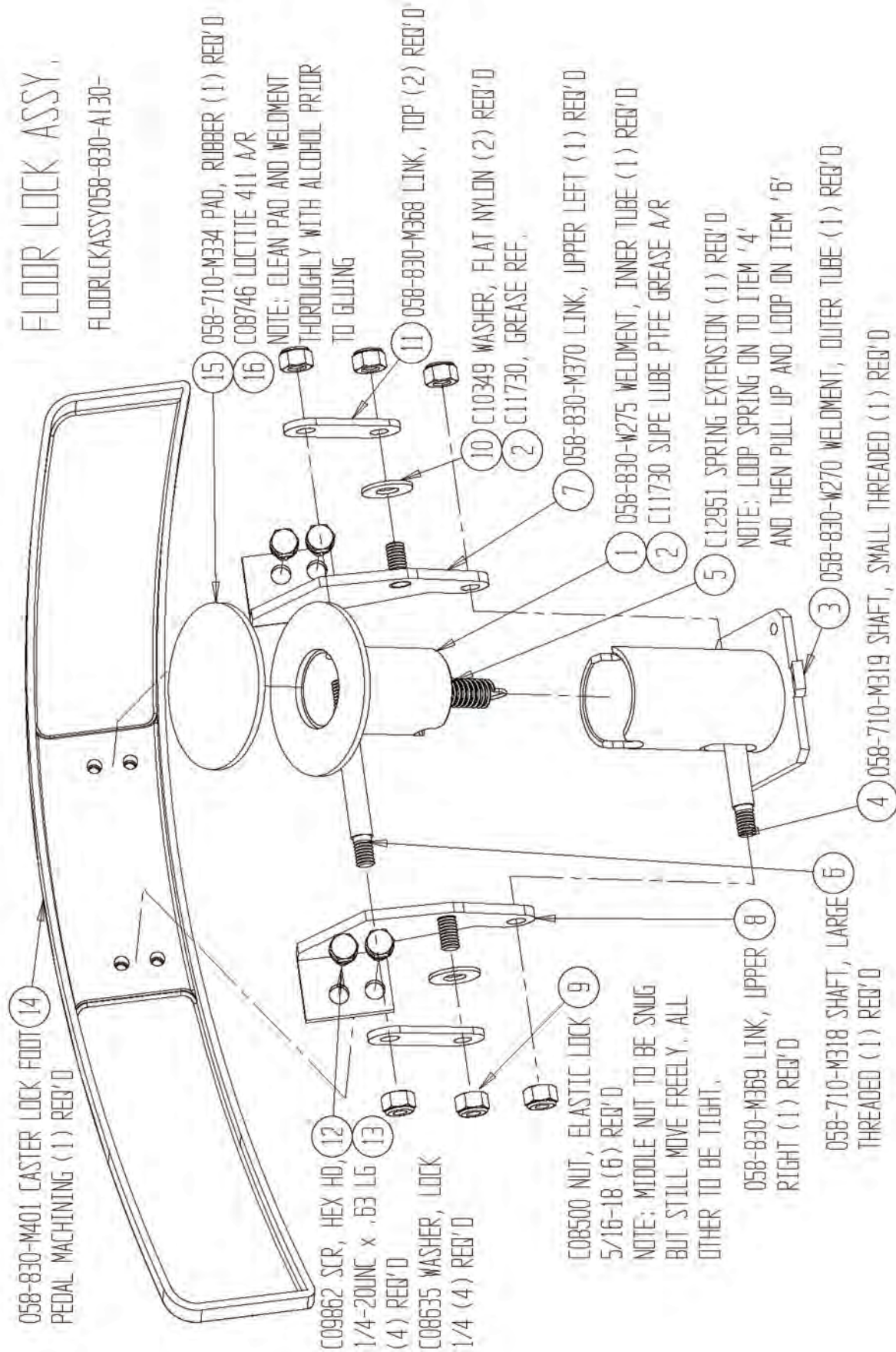
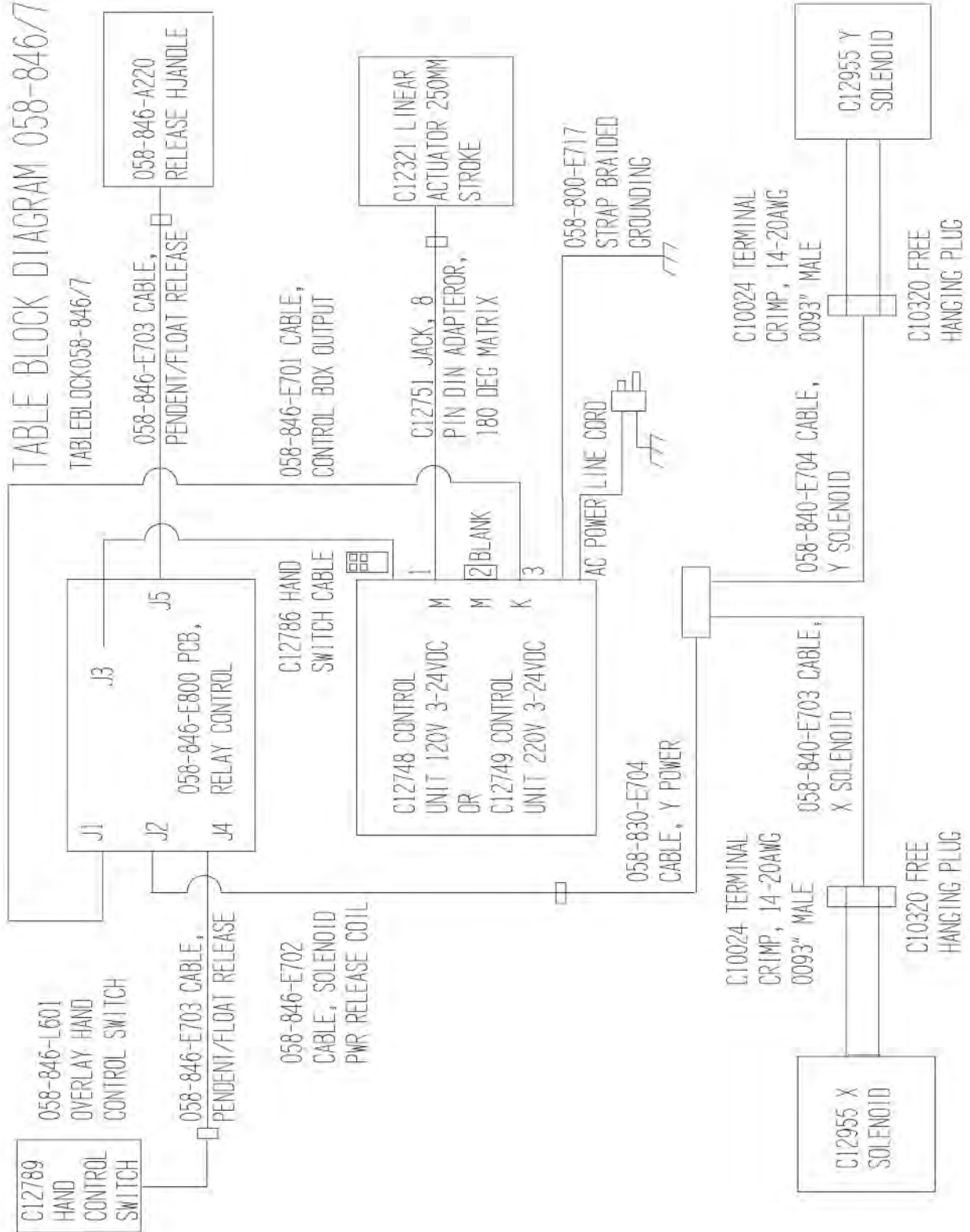


TABLE BLOCK DIAGRAM 058-846/7



BIODEX

Biodex Medical Systems, Inc.