

2026 OVERHEAD WEIGHING

CATALOG



RICE LAKE®
WEIGHING SYSTEMS

800-472-6703
www.ricelake.com

Train for Excellence

Rice Lake Weighing Systems' training courses offer resources for technicians of all experience levels.

Study electronic systems, indicator programming, weighing industry standards and more. Join specialty classes to get the skills you need for unique product lines.

Learn from Rice Lake experts to excel in real-world sales and service calls in 2026 and beyond!

ES-111

Fundamentals of Electronic Systems and Load Cells

January.....	19-23
April.....	20-24
June.....	1-5
August.....	3-7
October.....	19-23
November.....	16-20

ES-301

iRite™ Programming

January.....	12-16
October.....	5-9

RS-111

Retail Scales Training

March.....	2-6
April.....	13-17
July.....	6-10
August 31 - September 4	

ES-222

Advanced Scale System Troubleshooting

February.....	2-6
May.....	4-8
June.....	15-19
August.....	17-21

AW-111

Automatic Wrapper Training

March.....	16-20
May.....	18-22
July.....	20-24
September.....	14-18
November.....	2-6

Online

HB44.....	Handbook 44 Training
SB-111.....	Setpoints and Batching
ES-111.....	Fundamentals of Electronic Systems
ES-222.....	Advanced Scale System Troubleshooting

ES-300

1280 Enterprise™ Indicator Programming

January.....	5-9
September 28 - October 2	

AW-112

Micro Wrapper Training

February.....	10-12
March.....	24-26
June.....	23-25
July.....	28-30

**ENROLL
NOW**

View our complete training schedule,
read course descriptions and register today at:

www.ricelake.com/training



To speak with our training coordinator, call:

800-472-6703

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FREIGHT SERVICES OFFERED	"SMALL PACK"	LTL	TRUCKLOAD
Nationwide Same-day Service	Y* ***	Y*	N
Next Day (a.m.)	Y**	Y**	Y**
Next Day (END OF DAY)	Y	Y**	Y**
2-day	Y	Y	Y
3-day	Y	Y	Y
Ground	Y	Y	Y
Canada	Y	Y	Y
Mexico	Y	Y	Y
Express Freight (Air-over 150 lb)***	Y	Y	N
International (Sea)	Y	Y	Y
International (Air)	Y	Y	N

* Subject to cost/distance

** Subject to distance

*** Subject to flight availability and proximity of nearest airport

Same-day Services

These services do not carry the same service guarantees that standard delivery schedules do and are subject to availability.

Small Parcel Services

We ship with internationally recognized parcel carriers based on delivery time and services offered.

Determining Dimensional Weight for Small Parcel Shipments for Air and Ground

When shipping via air services, carriers require the shipping weight be determined by the greater of the boxed product's actual weight or its dimensional shipping weight. The formula for calculating dimensional shipping weight is as follows:

Domestic shipments via ground or air: $L \times W \times H/139$.

International air shipments: $L \times W \times H/139$.

Please note: Rice Lake Weighing Systems takes the added precaution of double-boxing some of our electronic products and balances. This may result in higher dimensional weight charges by the carrier. Even with this added precaution, we suggest you always ship high precision and fragile products via air services to reduce excessive handling.

Less than Truckload (LTL)

Full service LTL coverage for the continental United States, Puerto Rico, Canada and Mexico.

Note: A standard LTL delivery is considered to be one that ships from either a company or partner dock to arrival at a standard commercial address with disposition of the goods at the rear of the truck. This enables offloading by material handling equipment provided by the consignee at either ground level or via loading dock. The freight in question should be palletized and secured in a way to facilitate the safe handling of the freight with no one dimension over six feet.

Any LTL delivery falling outside of this criteria may accrue accessorial charges levied by the carrier in line with their tariff rules. It is recommended that any potential accessorial costs are discussed at the time of order placement so these costs can be billed appropriately at the time of shipment. If this is not the case, Rice Lake reserves the right to charge the customer retrospectively for any accessorial costs incurred during the delivery process.

Accessorial charges include, but are not limited to the following:

Lift gate, call for appointment and guaranteed delivery: Day and by 10:30 a.m. (where available). Excessive length, inside delivery.

Note: Cross the first threshold only for high-cost delivery areas such as government sites and mines, re-delivery, re-consignment, residential and restricted access shipments. All prices are available on request.

Full Truckload

Various truckload providers give us the ability to ship to the contiguous United States, Alaska, Canada and Mexico.

Forwarders (International Freight)

We can provide service through a forwarder of our choice, or select one of your preferred forwarders.

Air freight: All of our forwarders are internationally recognized brands.

Ocean freight: All of our forwarders are internationally recognized brands.

Shipping Information

Rice Lake Weighing Systems Freight Claims Procedure

Incidents can happen anytime between a package's departure from Rice Lake's loading dock and the time you receive it. For that reason, we are asking you to follow the procedures below when receiving a shipment.

The Bill of Lading (BOL) or Delivery Receipt (D/R) is the only record of the product's condition when it arrives at your site. If you do not inspect a shipment before signing, you are essentially waiving the right to collect on a damage claim regardless of whether the damage is visible or concealed. Your signature on a delivering carrier's BOL or D/R constitutes acceptance of the merchandise "as is." This proof is essential in filing a claim and holding the responsible parties accountable for items damaged or missing while in transit. Remember, once you sign, the goods and responsibility are yours.

Receiving a Shipment

- Check immediately for possible damage during shipment. Inspect, examine and inventory your delivery as it is unloaded.
- Open cartons and containers. Any suspicion of damage or shortage must be noted on the BOL or D/R. This information must include the item, discrepancy and condition of the item in question. If this is NOT noted, the liability to prove the damage was done by the delivering carrier is your responsibility.
- The driver cannot leave your receiving dock until the BOL or D/R is signed, regardless if they are behind schedule or not. Do not be intimidated by the driver.

Damaged Shipment

- Discovered damage: If the box, crate or merchandise is visibly damaged beyond what you would consider to be normal shipping wear and tear, refuse the delivery and request a Return Authorization Number from the driver in order for the shipment to be sent back to its origin at no charge.
- Concealed damage: Immediately document and photograph the damage and packaging. Keep all crating and packaging material with the damaged item(s) for inspection by the company's claim inspector until told to either return or dispose of the item(s). The item(s) should be moved minimally—only to an area where it can be inspected by the carrier or their agent.
- Keep a second copy of the BOL or D/R noting the damage and the driver's signature.
- Call your Rice Lake customer service representative to report the shortage and/or damage. Ideally, the call should be made before the driver leaves the site.

At this point, a claim for concealed damage will be started and an inspection will be requested. The inspector will determine if the damage was possibly caused by the carrier. A report and claim must be filed with the carrier within seven days after delivery. The sooner concealed damage is discovered and reported, the better.

Small Parcel Shipments

In general, it is the policy of small parcel carriers to not deliver damaged packages but rather take them back to the distribution center for evaluation. However, that does not always happen. Occasionally if the package is deemed to be ok, it will be re-taped and delivered to the consignee. If damage is noticed while still at the distribution center, a notation should have been entered into the system.

If you do receive a package that appears to be damaged, you can either refuse as damaged or accept the damaged package and report the damage immediately to your Rice Lake customer service representative with the tracking number. They will, in turn, contact the relevant team member from their support group, so the claims process can be started. **Note: Drivers do not normally note the package was damaged until it is brought back to the distribution center. A clerk will note damage at that point.**

Questions

If you have any questions about shipping or potential damages to your shipment, contact us at 800-472-6703 and a member of our sales and logistics team will assist you.

Customer Service Contacts

CUSTOMER
ASSISTANCE

At Rice Lake Weighing Systems, we strive to give you the best customer service in the industry. You can depend on our knowledgeable staff to deliver decisive, courteous assistance when you need it most.

Customer Service Representative Hours (United States Central Standard Time):

Monday through Friday 6:30 a.m. to 6:30 p.m.; Saturday 8:00 a.m. to noon



Sue Radowick
Inside Sales



Patrick Hillman
Technical Sales &
Service Specialist



Casey Sutherland
Technical
Customer Service
Representative



David Garcia
Customer Service
Supervisor



Bob Davis
Regional Sales
Director



Rob Upright
Regional Sales
Director



Terry Clark
Product Manager



Rob Nelson
Engineering
Manager



Phil Gray
Director of
Operations

Trademarks

The following product names, logos, brands and other trademarks featured or referred to within this publication are the property of their respective trademark holders.

Access™	Fairbanks™	NatraSorb®	SUREFOOT™
Adventure Pro®	Flintec™	Novell®	Symbol®
Allen-Bradley®	Genius®	OHAUS®	TekLynx®
Amphenol®	Hewlett-Packard™	OKI®	Toledo®
AstraLabel™	Howe™	Pax®	Torque™
AstraLink™	IBM®	pcANYWHERE®	TRANSCORE®
AutoCal™	InCal™	Peachtree®	Trooper®
Beldfoil®	Intel®	Pelican™	Turck®
Bitstream®	Interchange®	Pick N Pluck™	Valor®
Cardinal®	Intercomp CS™	Pioneer™	Voyager®
Cent-O-Gram®	Intercomp PT300DW™	PowerCell®	Vulcan®
Centronics®	Intercomp PT300™	Powerware®	WinCT®
Citizen®	IONMASTER™	PreVent™	Windows®
ConnexLink™	iPAQ™	Prodigy Max™	WinWedge®
ControlNet®	ISOBAR®	Prodigy™	Xscale®
Conxall®	ISOBLOK®	PROFIBUS®	XTend-PKG™
CRS™	Java™ POS	ProPrinter®	Zebra®
Cubis®	LabelView™	Quencharc®	ZigBee™
Datalogic QuickScan®	LifeGuard™	Quickbooks®	ZPL®
Datamax-O'Neil®	Linux®	QuickScan®	
DeviceNet®	LoopTracker™	QuikSharp™	
Dial-O-Gram™	Lotus™	R STAHL®	
DIGI®	Maxi-Scoop™	Ranger™	
Discovery™	MaxWax™	Rapid Exchange®	
Dymo®	Microline®	Rockwell Automation®	
EPL®	Microsoft®	Roman and Swiss™	
EPL2®	Midrics®	S4M™	
EPSON®	MIFARE®	Sartorius®	
ESC/POS®	Minebea Intec®	Scout Pro®	
EtherCAT®	Mobile 5.0™	SI®	
EtherNet/IP™	Motiontrap™	STAR®	
Excel™	Motorola ColdFire®	The Crosby Group LLC®	
Explorer®	MS-DOS™		

The terms “buyer,” “authorized reseller,” and “customer” as used herein, shall mean the party placing the purchase order with Rice Lake Weighing Systems. No contractual relationship between Rice Lake Weighing Systems and said party shall arise until such time as a purchase order has been accepted by Rice Lake Weighing Systems and such acceptance has been indicated on a written acknowledgment. Orders shall be subject to Rice Lake Weighing Systems’ standard terms and conditions as printed below, subject to correction for clerical errors.

Any conditions stipulated by the buyer which are in contradiction to these sales terms and conditions shall only be valid if expressly acknowledged by Rice Lake Weighing Systems in writing.

1. Prices

(a) Rice Lake Weighing Systems (Rice Lake) prices are net 30 days Ex Works Rice Lake plants. Orders are subject to approval of our credit department with rights reserved to change or withdraw credit terms without notice and to terminate any orders when invoices for work done thereon have gone unpaid for 60 days.

(b) Prices do not include taxes of any kind by federal, state, municipality or other governmental authority, which Rice Lake may be required to collect or pay with respect to the sale or shipment of goods sold hereunder. Regardless of when any such taxes are determined or become payable, all taxes would be the responsibility of the customer and would be in addition to the prices quoted hereon.

(c) This quotation is made upon the basis of the cost of materials and labor as of the date of this quotation. A change in such costs shall give Rice Lake the right to alter prices to reflect such changes in cost.

(d) Requests for additional documentation, drawings, audits of factories or inspection of equipment in-process, additional testing, additional inspections and record retention will be quoted as a separate item even if we have already issued quotations for products and services.

2. Shipment, Title, Risk of Loss

(a) All shipments are Ex Works point of shipment. Title and risk of loss or damage passes to the customer upon presentation of the goods to the customer's carrier at Rice Lake's facility.

3. Quantity, Materials and Tolerances

(a) Rice Lake assumes no responsibility for loss or damage occurring by reason of delay or inability to deliver caused by fires, strikes, accidents, embargoes, car shortages, delays of carriers, insurrection, riots, acts of the civil or military authorities, nor will we assume responsibility for any reason whatever for damages of any kind on account of failure to deliver at the time specified. The customer shall indemnify and hold Rice Lake harmless from all direct and consequential costs and damages resulting from such loss or delay.

4. Weight Calibration Services

The uncertainty of measurement is included in the decision rule in determining pass/fail criteria of the Maximum Permissible Error (MPE).

5. Patents

If this quotation covers parts made specifically for the customer, the customer agrees to indemnify and hold Rice Lake harmless against any loss resulting from infringement of patents or trademarks, or from claims of such infringements and shall pay all legal and defense costs incurred by Rice Lake in the defense of such actions.

6. Software

Unless specifically otherwise stated, any and all software associated or part of any product sold, loaned on trial or demonstration to the customer is to be considered proprietary to Rice Lake. The customer agrees not to duplicate for distribution or to sell or distribute in any way without the prior written consent of Rice Lake.

7. Changes and Cancellation: Rejection, Claims

(a) Orders placed with Rice Lake are not subject to cancellation, change or reduction in amount or suspension of deliveries except with Rice Lake's consent and upon terms that indemnify Rice Lake against loss. Unless confirmed in writing, all verbal agreements are void.

(b) Rice Lake will not be responsible for changes in design, deliveries or other instructions, unless they are furnished in writing. The customer agrees to pay for all tooling charges caused by changes in design or specifications.

(c) Samples submitted shall be deemed approved unless written rejection is received within two weeks of submission.

(d) Manufactured parts will be shipped and billed as they are produced.

(e) Claims for shortage or rejections for defects must be made within 10 days of receipt of goods. Credit will be rendered on such defective parts after we have had an opportunity to inspect them, provided they are returned to our factory, transportation charges prepaid, within 30 days, and provided they have not been altered or defaced in any way.

8. Tooling and Designing

(a) In consideration of the engineering service necessary in the designing of jigs, fixtures and tooling not being charged for, but being quoted on the basis of labor and material only, and not at their fair market value, such jigs, fixtures and tooling shall remain in our possession for at least one year. Thereafter, the customer desiring delivery of such jigs, fixtures and tooling shall pay an engineering charge of 50 percent of the original price of said jigs, fixtures and tooling and accept same as-is.

(b) When requested, we will submit suggestions concerning design and construction of parts, but we will not accept responsibility of liability for the practicability of these suggestions if adopted by the customer.

9. Delivery and Adjustment to Price

(a) If the customer requests that the goods be manufactured and shipped on a date (or dates) earlier than originally agreed to by Rice Lake and the customer, and Rice Lake agrees to the earlier date (or dates), any increase in the cost of performance incurred by Rice Lake resulting from earlier manufacture and shipment will be included in an adjustment of the purchase price to be made by Rice Lake and will be paid by the customer.

Terms and Conditions

(b) Should shipments be held beyond scheduled date for convenience of the customer, goods will be billed and charges will be made for warehousing, trucking and other expenses incident to such delay. Reasonable and sufficient care is taken by Rice Lake in crating its goods. Rice Lake cannot be held responsible for breakage after having received "in-good-order" receipts from the transportation carrier. All claim for loss and damage must be made by the customer to the carrier, but we will assist insofar as practical in securing satisfactory adjustment of such claims.

10. Payment and Liens

(a) All invoices shall be due and payable when submitted for payment in accordance with the revisions of Rice Lake terms. No withholding of funds, back charges or credits against amounts otherwise due to Rice Lake will be permitted unless specifically agreed to in writing by Rice Lake. Settlement of any amounts due to the customer will be negotiated as separate items and not as offsets against amounts otherwise due to Rice Lake from the customer for products sold hereunder.

(b) Any unpaid account for work done shall constitute a lien on any jigs, fixtures, manufactured parts and raw materials in Rice Lake possession. In the event any account remains open and unpaid for 90 days, Rice Lake reserves the right to use the customer's jigs and fixtures to make parts therefrom, and to sell or dispose of manufactured parts and raw materials.

(c) The customer shall not assign or transfer any rights or obligations arising from this proposal, or monies payable thereunder, without the prior written consent of Rice Lake, and any such assignment or transfer made without such written consent shall be deemed null and void.

11. Additional Provisions

(a) Errors—stenographic and clerical errors are subject to correction.

(b) These terms and conditions constitute the entire contract between the customer and Rice Lake, transcending any oral arrangements or representations which may be inconsistent therewith.

(c) This quotation is made under and shall be governed by the laws of the state of Wisconsin.

12. Resale of Rice Lake Weighing Systems Products

In order to ensure compliance with the U.S. Export Administration Regulations we ask you to comply with the following:

(a) The customer shall not export or re-export Rice Lake Weighing Systems products, either directly or indirectly, in contravention of any applicable law, statute or regulation and will first obtain any required licenses or authorizations from the relevant government authority when necessary as prescribed by law.

(b) The customer confirms that it is familiar with and complies with the relevant national and international export control regulations and embargo regulations. The customer furthermore confirms that it is in particular familiar with and complies with the U.S. Department of Commerce, Export Administration Regulations; U.S. Department of Treasury, OFAC Sanctions; the U.S. Department of Defense, ITAR requirements and the U.S. Department of State regulations.

(c) If deemed necessary, Rice Lake Weighing Systems, in individual cases may make further requests from the customer for information required for export compliance.

(d) Should it be necessary for the customer to obtain an export license from the appropriate authorities pursuant to the aforementioned regulations, the customer shall apply for such a license autonomously and at their own expense.

13. Sale of Hazardous Area Equipment

It is the responsibility of the reseller to either:

(a) Keep a permanent, traceable record of the equipment location (the end user); or,

(b) Return a completed Rice Lake Hazardous Area Classification Form #1033 signed by the reseller and the end user's hazardous or classified area defining authority. The form must be returned to Rice Lake Weighing Systems for acceptance and permanent record. In the event of an incident, a third party may require that the record be produced. It is the end user's responsibility to maintain compliance with national and local regulations for proper specification, installation, operation and service of this equipment.

The foregoing warranties are exclusive and in lieu of all other express and implied warranties whatsoever, including but not limited to implied warranties of merchantability and fitness for a particular purpose. Rice Lake shall not be subject to any other obligations or liabilities whatsoever with respect to parts manufactured or supplied by Rice Lake or services rendered by it.

Anything herein to the contrary notwithstanding, Rice Lake shall not be liable for incidental and consequential damages, and in substitution for all remedies which the customer may have under any applicable law. The customer's sole and exclusive remedy against Rice Lake for any breach of warranty or any other breach relating to goods delivered pursuant hereto shall be for repair or replacement (at Rice Lake's option) of the goods or parts effected by such breach.

Warranty and Limitation of Liability

Warranties

Standard Product Limited Warranty

Rice Lake Weighing Systems (Rice Lake) warrants that all Rice Lake branded equipment and systems properly installed by an authorized reseller or original equipment manufacturer (OEM) will operate per written specifications as confirmed by the authorized reseller/OEM and accepted by Rice Lake. All systems and components are warranted against defects in materials and workmanship for one (1) year from the date of shipment from Rice Lake, unless otherwise stated in the product catalog or manual. Rice Lake warrants that the equipment sold here under will conform to the current written specifications authorized by Rice Lake. Rice Lake warrants the equipment against faulty workmanship and defective materials. If any equipment fails to conform to these warranties, **Rice Lake will, at its option, repair or replace such goods returned within the warranty period subject to the following conditions:**

Upon discovery by the Customer of such nonconformity, Rice Lake will be given prompt written notice with a detailed explanation of the alleged deficiencies.

Individual electronic components returned to Rice Lake for warranty purposes must be packaged to prevent electrostatic discharge (ESD) damage in shipment. Packaging requirements are listed in the publication, "Protecting Your Components From Static Damage in Shipment," available from the Rice Lake Equipment Return Department.

Examination of such equipment by Rice Lake confirms that the non-conformity actually exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair, or improper testing. Rice Lake shall be the sole judge of all alleged non-conformities.

Such equipment has not been modified, altered, or changed by any person other than Rice Lake or its duly authorized repair agents.

Cutting the load cell cable will void the warranty.

Rice Lake will have a reasonable time to repair or replace the defective equipment. The Customer is responsible for shipping the product to Rice Lake. Rice Lake is responsible for shipping the product back to the Customer.

In no event will Rice Lake be responsible for travel time or on-location repairs, including assembly or disassembly of equipment. Nor will Rice Lake be liable for the cost of any repairs made by others.

On all intrinsically safe equipment, any field repair or modifications voids any and all warranties expressed or implied and void F.M. approval.

Any loose hardware, screws, washers or non-ESD bags of hardware stored inside indicator will void warranty. This could cause harm to repair technician or damage CPU board.

If just the board is sent in for repair, the serial number of the product the board is from should accompany the board.

These warranties exclude all other warranties, expressed or implied, including without limitation warranties of merchantability or fitness for a particular purpose. Neither Rice Lake nor the authorized reseller will, in any event, be liable for incidental or consequential damages at the point of use. Rice Lake and the Customer agree that Rice Lake's sole and exclusive liability here under is limited to repair or replacement of such goods. In accepting this warranty, the Customer waives any and all other claims to warranty.

Should the seller be other than Rice Lake, the Customer agrees to look only to the seller for warranty claims. No terms, conditions, understanding, or agreements purporting to modify the terms of this warranty shall have any legal effect unless made in writing and signed by a corporate officer of Rice Lake and the Customer.

Carrier Product Damage

As part of our commitment to customer satisfaction and in accordance with ISO 9001 standards, we make every attempt to pack our products so they will arrive in new condition. Occasionally due to rough handling or carelessness of carrier, product may arrive in a damaged condition. When this happens, don't assume that the shipment left Rice Lake in that condition or that the original packing was not sufficient.

The receiver, whether it is the authorized reseller or their Customer, is responsible for making a notation of damaged or missing items when signing the carrier's delivery receipt. If you or your Customer are not sure whether there is damage, we suggest adding a statement "CONDITION UNKNOWN" to the delivery receipt. In the event that damage or missing items are not properly documented at time of receipt, the carrier is relieved of responsibility and the receiver is then responsible for the cost to get the product back to new condition.

After the damage or shortage has been properly noted with the carrier, contact Rice Lake immediately and keep all the original packaging material for inspection by the carrier's representative. It is also helpful in the claim process to take pictures of the condition of the packaging and damage.

When drop-shipping items to your Customers, it is imperative that you advise them of their responsibility in accepting shipments from common carriers. Even if the equipment is not expected to be installed or used for a period of time, the shipment must be inspected at time of receipt in order to preserve their rights for making a claim.

Custom Software Limited Warranty

Rice Lake Weighing Systems (Rice Lake) warrants that (a) the software will perform in accordance with the specification and accompanying written endorsement by the Customer for a period of 90 days from the date of receipt; (b) any hardware accompanying the software will be free from defects in materials and workmanship under normal use and service for a period of one (1) year from the date of shipment from Rice Lake; and (c) the Customer should perform inspection and testing of software products prior to installation.

Warranty and Limitation of Liability

This limited warranty is void if failure of the software or hardware has resulted from accident, abuse, misapplication, or incorrect Customer specification. Any replacement software will be warranted for the remainder of the original warranty period or 30 days, whichever is longer.

If the software fails to conform to these warranties, Rice Lake will, at its option, repair or replace such goods returned within the warranty period subject to the following conditions:

Upon discovery by the Customer of such nonconformity, Rice Lake will be given prompt written notice with a detailed explanation of the alleged deficiencies.

Examination of software by Rice Lake confirms that the nonconformity exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair, improper testing, or incorrect Customer specification. Rice Lake shall be the sole judge of all alleged non-conformities.

Rice Lake will have a reasonable time to repair or replace the software. The Customer is responsible for shipping charges both ways.

In no event will Rice Lake be responsible for travel time or on-location repairs, including assembly or disassembly of equipment. Nor will Rice Lake be liable for the cost of any repairs made by others.

These warranties exclude all other warranties, expressed or implied, including without limitation warranties of merchantability or fitness for a particular purpose. Neither Rice Lake nor the authorized reseller will, in any event, be liable for incidental or consequential damages at the point of use.

Rice Lake and Customer agree that Rice Lake's sole and exclusive liability here under is limited to repair or replacement of such goods. In accepting this warranty, the Customer waives any and all other claims to warranty.

Should the seller be other than Rice Lake, the Customer agrees to look only to the seller for warranty claims.

No terms, conditions, understanding or agreements purporting to modify the terms of this warranty shall have any legal effect unless made in writing and signed by a corporate officer of Rice Lake and the Customer.

Return Policies

Our commitment to our Customers states that if any standard product purchased from Rice Lake does not work, or if the incorrect product is shipped, **return it in its original shipping carton with all accessories in "like new" condition** for full credit or replacement within 30 days of purchase. **Electronic components returned to Rice Lake must be properly packaged to prevent electrostatic discharge (ESD) damage in shipment.** Packaging requirements are listed in the publication, "Protecting Your Components from Static Damage in Shipment," available online or from our Returns Department. This policy and the 30-day limit also apply to any products drop-shipped directly from the manufacturer.

Please note that if an incorrect quantity of product was shipped, Rice Lake must be contacted within 10 days of the purchase. Upon notification, we will immediately correct the situation.

A restocking charge will apply if equipment is not in like-new condition. The restocking charge is directly proportional to the amount of time and material required to return the item to resalable condition—we will make every effort to do this quickly and economically. Equipment that has been abused and/or shows signs of excessive wear and cannot be reconditioned and resold will not be accepted for return or credit after excessive wear or has been modified.

As Applied to Drop Shipments

All Rice Lake return guidelines apply to products drop-shipped directly from the manufacturer. If a perceived error occurs, Rice Lake will investigate to the best of our ability to determine if the error occurred prior to shipping, during shipping, or at the end user site. If our records and subsequent investigation indicate that the shipment was correct when it left our factory, our responsibility extends only to the authorized reseller, not their end user. Our standard product warranty notes that our coverage extends only to equipment and systems **properly installed by an authorized reseller.**

Obtaining an RMA

A return merchandise authorization (RMA) number is required for all materials being returned to Rice Lake for credit. Flat rate repairs require purchase orders at time of RMA issuance. When returning equipment for repair or warranty reimbursement consideration, these simple steps will help to expedite your request:

1. Contact our Returns Department.
2. Please have your customer number and both the item description and detailed findings of product problem for repair.
3. Please have the original sales order or invoice number for items to be returned for credit or warranty.
NOTE: See return policy
4. An RMA number will be given for eligible returns. This RMA number may also be faxed or emailed per your request.

Return Shipments Outside the United States for Repair, Warranty, Calibration or Other Services and Re-export.

For shipment to the USA:

1. The commercial invoice must include the following statement:
 - i. "These goods are being returned for maintenance under"
 - ii. The RMA department will instruct you with the HTS code that you can use to achieve a duty free return. Typically the HTS code to use for articles returned temporarily for repair, alteration, process, and are expected to be reexported get classified as 9801.00.1012
2. The commercial invoice must list items individually and include the fair market value of the item based on its present condition for customs purposes only.
3. Please reference original Rice Lake commercial invoice number and date item was purchased if applicable.
4. Please note that failure to follow these procedures may cause delay and will certainly incur extra charges that will NOT be absorbed by Rice Lake.

Return Shipments Outside the United States Other Than for Repair, or Service Work Not Being Returned.

For shipment to the USA:

1. The commercial invoice must include the following statement:
 - a. "These goods have not been improved in value.
 - b. The RMA department will instruct you with the HTS code and country of origin that you can use to achieve a duty free return.
2. The commercial invoice must list items individually and include the fair market value of the item based on its present condition for customs purposes only.
3. Please reference original Rice Lake commercial invoice number and date item was purchased if applicable.
4. Please note that failure to follow these procedures may cause delay and possible reduction in your refund.
5. Please be advised that you may qualify for a refund of your duties and should contact your local customs authority for instructions and forms.

Special Order, Modified, Non-catalog or Non-stock Items

Due to the added resources and difficulty in reselling special or non-standard products, returns or credit are not allowed for special order equipment, special software programs, equipment physically modified or altered in the field, discrete electronic components, relays, manuals, or opened software packages.

Calibration Test Weights

All weights returned for credit will be assessed a restocking charge because of the required inspection and verification. Credit is not allowed for serialized weights, calibration or traceable services performed on weights.

Calibration Test Weights

No returns will be accepted for items that are specifically modified for the Customer's requirements. Examples of such modifications may include but not limited to:

1. Weights that have been specifically built to the customer's specifications.
2. Standard product specifically modified to the customer's specifications.
3. Standard product engraved with serial numbers at the customer's request.
4. Laboratory procedure charges.
5. Laboratory documentation fees.

Balances

Balances returned for credit within 30 days of purchase may be subject to a restocking fee if assessed by balance manufacturer.

Balance Repair Policy and Rates

We offer repair support on the following balance models:

- All Rice Lake brand models. Once we receive the equipment and the RMA form, an estimate will be prepared.

A minimum charge of one hour will apply. All balance repairs are covered by a 90-day limited warranty on parts and workmanship performed and noted under the scope of the specific repair.

Balances must be packaged to adequately protect them from damage in transit. Please refer to "How to Prepare a Balance for Shipment" available on our website or call our Returns Department.

How to Prepare a Balance for Shipment

The best and most effective method for shipping a balance at any time and for any reason is to use the original manufacturer's packaging materials and subsequently double box it as described below. Due to the nature of the equipment, new packaging materials can be expensive. It is best to retain the original packing.

In the event that the original manufacturer's packaging materials are not available, follow these instructions for top loading balances:

1. Remove the weighing platform cover, support buttons, weighing platform, floor plate and other devices installed in the weighing chamber. Pack these pieces individually in bubble wrap and tape the wrapping closed. Follow this same procedure for AC adapters and power cords. Please note that AC adapters and power cords are necessary to adequately evaluate any issues with the balance.
2. Examine the device (refer to the operating instructions) and if necessary, re-install or tighten any shipping screws/retaining devices to prevent damage to the weighing mechanism during shipment.
3. If the floor plate is not removable, ensure it is securely in place and cannot come loose during shipment, even if the balance is inverted. Do NOT invert the balance to test the security of the floor plate.
4. Clean the device of any loose debris or potential contaminants to our testing facility.
5. Prepare and sign a Statement of Decontamination (form #0679). This form MUST be included in a separate packing list envelope on the outside of the box with "Statement of Decontamination Form" clearly visible.
6. Using Scotch or aluminum tape, carefully secure all the glass doors on the device CLOSED. Be sure the tape is securely affixed and will not come off during shipment. Please note that on some devices, the glass breeze-break around the weighing chamber can actually be disassembled and packed separate prior to shipment. Refer to the manufacturer's operating instructions. If this is a feature of the device being return, disassemble the breeze break and pack it in its own packing material and box.
7. Use a large box that will provide a minimum of 3 inch of space around the device for loose-fill packing material.
8. Place a padding of foam or Styrofoam (at least 1 in thick) at the bottom of the box.
9. Place the balance in a large plastic bag and seal the bag closed.
10. Please put the device on top of the foam padding or Styrofoam from step 8 above.
11. Ensure that there is at least three inches of clearance between the top of the balance and the top of the box.

Warranty and Limitation of Liability

12. Using generous amounts of anti-static loose-fill packing material, fill all the spaces around the balance. Shake the box to cause the material to settle and add additional loose fill as necessary.
13. Place the small box containing all the items from step 1 above on top of the loose fill covering the balance. Add additional loose fill to completely cover all items within the box.
14. Double pack this box in another box that will again provide an additional two inches of space around the inner box. Fill all existing space between the inner and outer box with copious amounts of anti-static loose fill packing material.
15. Seal the box and include all the necessary documentation on the outside of the box. Be sure to include the Statement of Decontamination (form #0679) from step 5 above.

Repair Service Policies

Our Service Department is staffed Monday through Friday from 6:30 a.m. to 6:30 p.m., and Saturday from 8:00 a.m. to noon, Central Time. Please call or email Rice Lake at service@ricelake.com for answers to your technical questions and the status of repair products during normal business hours.

We provide quality and timely repairs for the products we sell. Flat rate repair is offered for selected models of indicators, printers and remote displays. Prior to returning a product for repair, our returns department will work with you to determine some key factors that will help Rice Lake better serve you. Please provide the following via phone to extension 5348 or an RMA form.

- Customer Number: Without a customer number we cannot issue an RMA number.
- Ship-to Address: Your customer number will bring up the bill-to address. You must inform Rice Lake of the ship-to address if it's different than the bill-to address.
- **Original sales and invoice orders: Required on warranty claims.**
- Freight Type: Unless stated otherwise, we ship the device back to you utilizing the same freight type in which we received it. If Rice Lake is responsible for freight charges, the carrier will be selected at the sole discretion of Rice Lake.
- **Definition of Product and Problem: Please provide as much detail as possible regarding the type of product, application and problem.**
- Purchase Order Number for Flat Rate Repair: Once we receive the equipment and the RMA, equipment for flat rate repair will be processed immediately. Other equipment will be evaluated and a minimum evaluation charge will apply (contact Rice Lake for exact pricing).

You may be asked about the possibility of a new replacement product. It may be in your best interest to explore the option of purchasing a new product if the repair will exceed 50 percent of authorized reseller net price, since new products carry full-warranty benefits.

Please note our hourly service rate on all current Rice Lake products. Contact Rice Lake for exact pricing. There is a 120-day limited warranty on parts and workmanship performed and noted under the scope of the specific repair.

California Proposition 65

Rice Lake Weighing Systems Statement

Proposition 65 requires businesses to inform Californians about exposures to chemicals that are listed by the State of California as known to cause cancer, birth defects or other reproductive harm. There are over 900 different chemicals listed under Proposition 65 and more chemicals are listed by the State of California each year. These chemicals may be in the products you purchase, or you may be exposed to them at home, at the workplace or within the environment. Proposition 65 enables Californians to make informed purchasing decisions about products that can expose you to these chemicals even in minute or trace amounts. California's Proposition 65 is a California only law.

Rice Lake Weighing Systems provides Proposition 65 warnings on the packaging of the products it sells that may require a warning in an abundance of caution. All of Rice Lake's products are safe for their intended use. We are providing this warning based on the knowledge that one or more chemicals included in the California Proposition 65 list is present in Rice Lake Weighing Systems products even if only in trace or minute amounts. To the extent that customers repackage any Rice Lake products they have sole responsibility for ensuring that the Rice Lake Proposition 65 warning is provided if the repackaged product is sold in California. Any Rice Lake customer who repackages a Rice Lake product but does not include the Rice Lake Proposition 65 warning that is included on the Rice Lake packaging agrees to defend and indemnify Rice Lake by counsel of its choice if a claim is asserted against Rice Lake based on the failure to provide a Proposition 65 warning on the repackaged product. The Rice Lake terms and conditions prevail over any conflicting terms in customer's purchase documentation and customer's order and receipt of Rice Lake Products is deemed acceptance of Rice Lake's terms and conditions. More information about California's Proposition 65 can be found at www.P65Warnings.ca.gov.



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The following product names, logos, brands and other trademarks featured or referred to within this publication are the property of their respective trademark holders.

MSI-3460 Challenger 3

Crane Scale

CRANE SCALES



Approvals



Standard Features

- Multi-color LED display
- Top lifting eye and bottom swivel hook
- Crosby® or equivalent with 360° non-bearing swivel hook
- Lb/kg switch selectable
- Six volt rechargeable battery and universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)
- Meets or exceeds OSHA, ANSI, ASME and other safety design standards (5:1 Ultimate Safety Factor)
- NTEP Certified (250 to 10,000 lb capacities)

Part Number/Price

Part #	Description	Est. Weight	Price
207063	250 lb (125 kg) 0.1 lb (0.05 kg)	22 lb	\$2,750.00
208091	500 lb (250 kg) 0.2 lb (0.1 kg)	22 lb	\$2,750.00
207064	1,000 lb (500 kg) 0.5 lb (0.2 kg)	22 lb	\$2,930.00
208138	2,000 lb (1,000 kg) 1 lb (0.5 kg)	22 lb	\$2,930.00
207065	5,000 lb (2,500 kg) 2 lb (1 kg)	39 lb	\$3,620.00
208092	10,000 lb (5,000 kg) 5 lb (2 kg)	39 lb	\$3,620.00
207067	15,000 lb (7,000 kg) 5 lb (2 kg)	67 lb	\$5,450.00
207633	250 lb (125 kg), RF Modem 0.1 lb (0.05 kg)	22 lb	\$2,930.00
208096	500 lb (250 kg), RF Modem 0.2 lb (0.1 kg) 22 lb	22 lb	\$2,930.00
207635	1,000 lb (500 kg), RF Modem 0.5 lb (0.2 kg) 22 lb	22 lb	\$3,110.00
208140	2,000 lb (1,000 kg), RF Modem 1 lb (0.5 kg)	22 lb	\$3,110.00
207637	5,000 lb (2,500 kg), RF Modem 2 lb (1 kg) 39 lb	39 lb	\$3,790.00
208098	10,000 lb (5,000 kg), RF Modem 5 lb (2 kg) 39 lb	39 lb	\$3,790.00
207639	15,000 lb (7,000 kg), RF Modem 5 lb (2 kg) 67 lb	67 lb	\$5,650.00
207640	250 lb (125 kg), with Wi-Fi 0.1 lb (0.05 kg) 22 lb	22 lb	\$3,075.00
208100	500 lb (250 kg), with Wi-Fi 0.2 lb (0.1 kg) 22 lb	22 lb	\$3,075.00
207642	1,000 lb (500 kg), with Wi-Fi 0.5 lb (0.2 kg) 22 lb	22 lb	\$3,230.00
208141	2,000 lb (1,000 kg), with Wi-Fi 1 lb (0.5 kg) 22 lb	22 lb	\$3,230.00
207644	5,000 lb (2,500 kg), with Wi-Fi 2 lb (1 kg) 39 lb	39 lb	\$3,945.00
208102	10,000 lb (5,000 kg), with Wi-Fi 5 lb (2 kg) 39 lb	39 lb	\$3,945.00
207646	15,000 lb (7,000 kg), with Wi-Fi 5 lb (2 kg)	67 lb	\$5,800.00

*Please review the Overhead Weighing Safety Guide

Options

(Contact MSI for application consultation)

- RF modem install for connectivity to MSI-8000, MSI-8000HD RF, MSI-8004HD RF remote display, TranSend™ and LaserLight2™ remote display (Typical range 100-300 ft line of sight)
- Rugged Remote (Requires 3460RF version, typical range 50 ft line of sight)
- Universal direct power supply (115/230 VAC)
- Audible alarm
- Wi-Fi communication is available for specialty applications

Specifications

Power:

6 volt rechargeable battery. 115/230 VAC battery charger is included

Resolution:

2,500 d max standard
(up to 10,000 d max non-standard)

Accuracy:

±0.1% (+1 d) of applied load

Annunciators:

COZ, net, gross, to tal, peak, low battery, lb/kg, motion, setpoints, ACK IN, ACK OUT, RF

Display:

Five-digit, 1.5 in (38 mm) LED with programmable brightness control; toggle between red, orange, green digits

Displayable Units:

Pounds or kilogram selectable

Keys/Buttons:

Power, zero, tare, user (programmable)

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -40 °F to 104 °F (-40 °C to 40 °C)

Rating/Material:

NEMA 4, IP65, powder coated cast aluminum

Design Overload:

200% Safe/500% Ultimate

Operating Time:

Up to 80 hours between charging with typical use.
Less with optional RF model link

Auto-Off Mode:

Select for 15, 30, 45, 60 minutes or off

Auto Sleep Mode:

Power down during non-use and power up with weight change or any key press

Service Counters:

Counts number of lifts over percentage of capacity and lifts over capacity

Filtering:

OFF, LO, HI-1, HI-2 selectable

Warranty:

One-year limited

Approvals:

NTEP 86-021: 250 to 10,000 lb
OIML R76/2006-A-NL1-21.36
CE
UKCA

MSI-3460 Challenger 3

Crane Scale

Options/Accessories

Part #	Description	Est. Weight	Price
140049	Battery assembly, 6 volt rechargeable	3 lb	\$190.00
139152	Universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)	5 lb	\$220.00
139153	Battery charger, 115/230 VAC, 50/60 Hz (EU, Type 3 plug standard)	5 lb	\$220.00
197201	Battery charger, 115 VAC, 50/60 Hz (NA plug standard) CEC compliant	5 lb	\$255.00
149549	Universal 115/230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000 remote display	3 lb	\$180.00
178004	LaserLight2, 4 in (100 mm) six-digit RF scoreboard (requires MSI-3460 with RF modem)	21 lb	\$3,350.00
178006	LaserLight2, 6 in (150 mm) six-digit RF scoreboard (requires MSI-3460 with RF modem)	37 lb	\$3,850.00
Consult	AC power supply	-	\$325.00
140058	AC conversion kit	1 lb	\$500.00
Consult	Audible alarm	-	\$420.00
222746	Retrofit kit	3 lb	\$1,225.00
173014	Rugged Remote control (requires MSI-3460 with RF modem)	3 lb	\$375.00
139381	MSI-8000 RF remote display (requires MSI-3460 with RF modem)	5 lb	\$1,530.00
153591	MSI-8000HD ScaleCore RF remote display (requires MSI-3460 with RF modem)	-	\$1,675.00
178281	MSI-8004HD AC, red/green 85~264 VAC, 47~440 Hz, 120~370 VDC	-	\$1,785.00

CRANE SCALES

MSI-4260 Port-A-Weigh

Industrial Crane Scale



Approvals



Measurement
Canada
Approved

Standard Features

- Multi-color LED display
- Top lifting eye or shackle with Crosby® (or equivalent) 360° thrust-bearing swivel hook
- 12 volt rechargeable battery and universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)

Options

(Contact MSI for application consultation)

- Rugged Remote control
- RF modem install for connectivity to MSI-8000, MSI-8000HD RF, MSI-8004HD RF remote display, TranSend™ and LaserLight2™ remote display. Typically 100 to 300 ft, line of sight; for longer range consult factory
- Anti-heat shielding for high temperature applications
- Substitute bottom swivel hook with shackle
- Oversized top lifting eye or shackle
- Oversized bottom hook
- Universal direct power supply; 85 to 265 VAC, 47 to 440 Hz / 130 to 300 VDC
- Wi-Fi communication is available for specialty applications and for use with the ScaleCore Webserver
- Low headroom top adapter
- Audible alarm
- Custom top and bottom interfaces
- Factory Mutual and ATEX approved intrinsically safe models available

Part Number/Price

Part #	Description	Resolution	Est. Weight	Price
197760	500 lb (250 kg), swivel hook, F/A	0.2 lb (0.1 kg)	53 lb	\$5,670.00
197761	2,000 lb (1,000 kg), swivel hook, F/A	1.0 lb (0.5 kg)	53 lb	\$5,700.00
197762	5,000 lb (2,500 kg), swivel hook, F/A	1.0 lb (0.5 kg)	62 lb	\$6,440.00
197763	10,000 lb (5,000 kg), swivel hook, F/A	2.0 lb (1.0 kg)	62 lb	\$6,440.00
197764	20,000 lb (10,000 kg), swivel hook, F/A	5.0 lb (2.0 kg)	105 lb	\$7,430.00
197765	30,000 lb (15,000 kg), swivel hook, F/A	10 lb (5.0 kg)	125 lb	\$7,530.00
197766*	50,000 lb (25,000 kg), swivel hook, F/A	10 lb (5.0 kg)	235 lb	\$14,200.00
197767*	70,000 lb (35,000 kg), swivel hook, F/A	20 lb (10 kg)	270 lb	\$18,690.00
197768*	100,000 lb (50,000 kg), swivel hook, F/A	20 lb (10 kg)	420 lb	\$27,080.00

*Comes with top shackle instead of lifting eye
Please review the Overhead Weighing Safety Guide

Specifications

Power:

12 V rechargeable battery (115/230 VAC battery charger is included)

Resolution:

2,000 to 5,000 d standard
(Up to 10,000 d available)

Accuracy:

±0.1% +1d of applied load

Annunciators:

COZ, net, gross, total, peak, low battery, lb/kg, motion, set points

Display:

1.2 in (30 mm), 5-digit, programmable LED display, multi-color (red, orange, green)

Displayable Units:

Pounds or kilograms selectable

Keys/Buttons:

Power, zero, tare, F1 (programmable)

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -40 °F to 122 °F (-40 °C to 50 °C)

Rating/Material:

NEMA Type 4, IP66 marine grade 356 alloy anodized cast aluminum

Design Overload:

200% Safe / 500% Ultimate (except where noted)

Operating Time:

Up to 200 hours between charging with typical use, less with optional RF modem

Auto-Off Mode:

Select for 15, 30, 45 minutes, 1 hour or off

Auto Sleep Mode:

Power down during non-use and power up with weight change or any key press

Service Counters:

Counts number of lifts over percentage of capacity and lifts over capacity

Filtering:

OFF, LO, HI-1, HI-2 selectable

Warranty:

One-year limited

Approvals:

NTEP 19-122: 500 to 70,000 lb
Measurement Canada AM-6198: 500 to 5,000 lb
Measurement Canada AM-6249:
10,000 to 20,000 lb

MSI-4260 Port-A-Weigh

Industrial Crane Scale

Options/Accessories

Part #	Description	Est. Weight	Price
150971	MSI RF modem option kit (used with MSI-4260, MSI-4260M, MSI-9600HT)	-	\$265.00
139381	MSI-8000 RF remote display (requires MSI-4260 with RF modem)	5 lb	\$1,530.00
173014	RF Rugged Remote control (requires MSI-4260 with RF modem)	3 lb	\$375.00
153591	MSI-8000HD remote display, AC power and tilt bracket option (requires MSI-4260 equipped with RF modem)	3 lb	\$1,675.00
178281	MSI-8004HD AC, red/green 85~264 VAC, 47~440 Hz, 120~370 VDC (requires MSI-4260 equipped with RF modem)	-	\$1,785.00
159221	Universal crane scale transport cart	180 lb	\$1,425.00
178004	LaserLight2, 4 in (100 mm) six-digit RF scoreboard (requires MSI-4260 equipped with RF modem)	21 lb	\$3,350.00
178006	LaserLight2, 6 in (150 mm) six-digit RF scoreboard (requires MSI-4260 equipped with RF modem)	37 lb	\$3,850.00
Consult	AC direct power supply	-	\$560.00
Consult	Audible alarm	-	\$420.00
Consult	Anti-heat shield	-	\$1,125.00
219296	Retrofit kit	5 lb	\$2,650.00
176956	Wi-Fi modem option kit (used in MSI-4260, MSI-4260M, MSI-6360, MSI-9600HT)	-	\$490.00
150367	Battery assembly, 12 V rechargeable	7 lb	\$170.00
138006	Universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)	4 lb	\$360.00
138007	Universal 115/230 VAC, 50/60 Hz battery charger (UK plug standard)	4 lb	\$370.00
138008	Universal 115/230 VAC, 50/60 Hz battery charger (EC plug standard)	4 lb	\$370.00
149549	Universal 115/ 230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000 remote display	3 lb	\$180.00
Sub Hook with Shackle			
Consult	500 to 10,000 lb, 6.5 ton shackle	-	Consult
Consult	20,000 to 30,000 lb, 17 ton shackle	-	Consult
Consult	50,000 lb, 25 ton shackle	-	Consult
Consult	70,000 lb, 40 ton shackle	-	Consult
Consult	100,000 lb, 55 ton shackle	-	Consult
Oversize Lifting Eye/Shackle			
Consult	500 to 10,000 lb capacity	-	Consult
Consult	20,000 to 30,000 lb capacity, adapter with 25 ton shackle	-	Consult
Consult	50,000 to 70,000 lb capacity	-	Consult
Consult	100,000 lb capacity	-	Consult

CRANE SCALES

MSI-4260 IS Port-A-Weigh

Intrinsically Safe Crane Scale



Approvals



Measurement
Canada
Approved

UK
CA



Standard Features

- LED display
- Top lifting eye or shackle with Crosby® (or equivalent) 360° thrust-bearing swivel hook
- 12 volt rechargeable battery and universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)

(Contact MSI for application consultation)

Part Number/Price

Part #	Description	Resolution	Price
156013	500 lb (250 kg), swivel hook	0.2 lb (0.1 kg)	\$7,650.00
156014	2,000 lb (1,000 kg), swivel hook	1.0 lb (0.5 kg)	\$7,650.00
156015	5,000 lb (2,500 kg), swivel hook	1.0 lb (0.5 kg)	\$7,650.00
156016	10,000 lb (5,000 kg), swivel hook	2.0 lb (1.0 kg)	\$7,650.00
156017	20,000 lb (10,000 kg), swivel hook	5.0 lb (2.0 kg)	\$9,700.00
156018	30,000 lb (15,000 kg), swivel hook	10 lb (5.0 kg)	\$9,700.00
156019	50,000 lb (25,000 kg), swivel hook	10 lb (5.0 kg)	\$15,500.00
156020	70,000 lb (35,000 kg), swivel hook	20 lb (10 kg)	\$19,500.00
156021	100,000 lb (50,000 kg), swivel hook	20 lb (10 kg)	\$29,000.00

Capacities over 70,000lb are not NTEP

Options/Accessories

Part #	Description	Price
170606	Battery charger	\$350.00
167777	Spare battery	\$310.00

*Please review the Overhead Weighing Safety Guide

Specifications

Power:

12 V rechargeable battery (115/230 VAC approved battery charger is included)

Resolution:

3,000 to 5,000 d standard
(up to 10,000 d available)

Accuracy:

± (0.1% +1 d) of applied load

Annunciators:

COZ, net, gross, total, peak, low battery, lb/kg, motion, setpoints

Display:

Five-digit, 1.2 in (30 mm) LED with programmable brightness control

Displayable Units:

Pounds or kilograms selectable

Keys/Buttons:

Power, zero, tare, Mode F1 (programmable)

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)

Rating/Material:

NEMA Type 4, IP66 marine grade 356 alloy anodized cast aluminum

Design Overload:

200% Safe / 500% Ultimate (except where noted)

Operating Time:

Up to 80 hours between charging with typical use

Auto-Off Mode:

Select for 15, 30, 45 minutes, 1 hour or Off

Auto Sleep Mode:

Power down during non-use and power up with weight change or any key press

Service Counters:

Counts number of lifts over percentage of capacity and lifts over capacity

Filtering:

OFF, LO, HI-1, HI-2 selectable

Warranty:

One-year limited

Intrinsic Safety:

USA Listings
FM16US0156X
IS Class I, Division 1, Groups C, D; T4 - PN 184530
IS Class II, Division 1, Groups, E, F, G; T4; Class III, Division 1 - PN 184530
Class I, Zone 0, AEx ia IIB T4 Ga - PN 184530
Class I, Zone 20, AEx ia IIIC T135°C Da - PN 184530
Ta = -20 °C to +50 °C
Canada Listings
FM16CA0092X
Ex ia Class I, Division 1, Groups C, D; T4 - PN 184530
Ex ia Class II, Division 1, Groups E, F, G, Class III, Division 1; T4 - PN 184530
Class I, Zone 0, Ex ia IIB T4 Ga - PN 184530
Class I, Zone 20, Ex ia IIIC T135°C Da - PN 184530
TA = -10 °C to +50 °C
ATEX / UKEX Listings
FM18ATEX0052X
FM21UKEX0104X
II 1 G Ex ia IIB T4 Ga
II 1 D Ex ia IIIC T135°C Da
-10 °C Ta +50 °C

Approvals:

NTEP 19-122: 500 to 70,000 lb
Measurement Canada AM-6198: 500 to 5,000 lb
Measurement Canada AM-6249:
10,000 to 20,000 lb
cFMus Approved

MSI-4260M Port-A-Weigh

Industrial Crane Scale



Standard Features

- LCD display
- IP66 cast aluminum
- Top lifting eye or shackle with Crosby® (or equivalent) 360° thrust-bearing swivel hook
- Battery operated, six (6) D cell 1.5V alkaline batteries or 12 volt rechargeable battery (115/230 VAC battery charger is included)

Options

(Contact MSI for application consultation)

- Rugged Remote
- RF modem install for connectivity to MSI-8000, MSI-8000HD RF, MSI-8004HD RF remote display, TranSend™ and LaserLight2™ remote display
- Wi-Fi communication available for specialty applications
- Substitute bottom swivel hook with shackle
- Oversized top lifting eye or shackle
- Oversized bottom hook
- Universal direct power supply; 85 to 265 VAC, 47 to 440 Hz/130 to 300 VDC
- Low headroom top adapter
- Audible alarm
- Custom top and bottom interfaces

Specifications

Power:

Battery operated, six (6) D cell 1.5 V alkaline batteries or 12 V rechargeable battery (115/230 VAC battery charger is included)

Resolution:

Max NTEP Approved Class III: 2,500 d
Max NTEP Approved Class III: 5,000 d
Max Non-NTEP Approved: 10,000 d

Accuracy:

±0.1% +1 d of applied load

Annunciators:

COZ, battery level, net, total, lb/kg, stability, RF and setpoint LEDs

Display:

Five-digit, 1.75 in (44.5 mm) LCD with programmable brightness control

Displayable Units:

Pounds or kilograms select able

Keys/Buttons:

Power: Turns unit on or off
Zero: Zeros applied load up to 100% of capacity (limited range in NTEP configuration)
Tare: Tares applied load and displays weight in Net mode
User: Programmable as test, total, unit, peak hold, net/gross, view total and print

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -20 °F to 122 °F (-28 °C to 50 °C)

Rating/Material:

IP66 cast aluminum

Design Overload:

200% Safe / 500% Ultimate (except where noted)

Operating Time:

Six (6) D Cell 1.5V alkaline batteries:
Up to 1,000 hours of battery life with typical use, less with RF modem
12 volt rechargeable battery: Up to 250 hours between charging with typical use, less with RF modem

Auto-Off Mode:

Powers off after the scale is not used for the set time (in minutes); 15, 30, 45, 60 or OFF selectable

Auto Sleep Mode:

Power down during non-use after the set time (in minutes) and powers up with weight change or any key press; 5, 15, 30 or OFF selectable

Service Counters:

Counts number of lifts over percentage of capacity and lifts over capacity

Filtering:

OFF, LO, HI-1 or HI-2 selectable

Radio Link:

802.15.4 at 2.4 GHz

Radio Effective Range:

Typically 100 to 300 ft line of sight

Warranty:

One-year limited

Approvals:

NTEP 19-122: 500 to 70,000 lb
Measurement Canada AM-6198: 500 to 5,000 lb
Measurement Canada AM-6249: 10,000 to 20,000 lb

Approvals



Measurement
Canada
Approved

Part Number/Price

Part #	Description	Resolution	Est. Weight	Price
Battery				
201951	500 lb (250 kg) with 12V battery F/A	0.2 lb (0.1 kg)	53 lb	\$5,650.00
201953	2,000 lb (1,000 kg) with 12V battery F/A	1.0 lb (0.5 kg)	53 lb	\$5,650.00
201954	5,000 lb (2,500 kg) with 12V battery F/A	1.0 lb (0.5 kg)	62 lb	\$6,150.00
201955	10,000 lb (5,000 kg) with 12V battery F/A	2.0 lb (1.0 kg)	62 lb	\$6,150.00
201956	20,000 lb (10,000 kg) with 12V battery F/A	5.0 lb (2.0 kg)	105 lb	\$8,225.00
201957	30,000 lb (15,000 kg) with 12V battery F/A	10 lb (5.0 kg)	125 lb	\$8,650.00
201958	50,000 lb (25,000 kg) with 12V battery F/A	10 lb (5.0 kg)	235 lb	\$13,200.00
201959	70,000 lb (35,000 kg) with 12V battery F/A	20 lb (10 kg)	270 lb	\$16,850.00
201960	100,000 lb (50,000 kg) with 12V battery F/A	20 lb (10 kg)	420 lb	\$26,000.00
D-Cell Battery				
201999	500 lb (250 kg) with D-cell battery F/A	0.2 lb (0.1 kg)	53 lb	\$5,650.00
202000	2,000 lb (1,000 kg) with D-cell battery F/A	1.0 lb (0.5 kg)	53 lb	\$5,650.00
202001	5,000 lb (2,500 kg) with D-cell battery F/A	1.0 lb (0.5 kg)	62 lb	\$6,150.00
202002	10,000 lb (5,000 kg) with D-cell battery F/A	2.0 lb (1.0 kg)	62 lb	\$6,150.00
202003	20,000 lb (10,000 kg) with D-cell battery F/A	5.0 lb (2.0 kg)	105 lb	\$8,225.00
202004	30,000 lb (15,000 kg) with D-cell battery F/A	10 lb (5.0 kg)	125 lb	\$8,650.00
202005	50,000 lb (25,000 kg) with D-cell battery F/A	10 lb (5.0 kg)	235 lb	\$13,200.00
202006	70,000 lb (35,000 kg) with D-cell battery F/A	20 lb (10 kg)	270 lb	\$16,850.00
202007	100,000 lb (50,000 kg) with D-cell battery F/A	20 lb (10 kg)	420 lb	\$26,000.00

Capacities over 70,000 lb are not NTEP and capacities over 20,000 lb are not currently Measurement Canada

*Please review the Overhead Weighing Safety Guide

CRANE SCALES

MSI-4260M Port-A-Weigh

Industrial Crane Scale

Options/Accessories

Part #	Description	Est. Weight	Price
150971	MSI RF modem option kit (used in MSI-4260, MSI-4260M, MSI-9600HT)	-	\$265.00
139381	MSI-8000 RF remote display (requires MSI-4260M with RF modem)	5 lb	\$1,530.00
173014	RF Rugged Remote control (requires MSI-4260M with RF modem)	3 lb	\$375.00
153591	MSI-8000HD remote display, AC power and tilt bracket option (requires MSI-4260M equipped with RF modem)	3 lb	\$1,675.00
178281	MSI-8004HD AC, red/green 85~264 VAC, 47~440 Hz, 120~370 VDC	-	\$1,785.00
159221	Universal crane scale transport cart	180 lb	\$1,425.00
178004	LaserLight2, 4 in (100 mm) six-digit RF scoreboard (requires MSI-4260M equipped with RF modem)	21 lb	\$3,350.00
178006	LaserLight2, 6 in (150 mm) six-digit RF scoreboard (requires MSI-4260M equipped with RF modem)	37 lb	\$3,850.00
176956	Wi-Fi modem option kit (used in MSI-4260, MSI-4260M, MSI-6360, MSI-9600HT)	-	\$490.00
219297	Retrofit kit	-	\$2,775.00
Accessories			
150367	Battery assembly, 12 V rechargeable	7 lb	\$170.00
138006	Universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)	4 lb	\$360.00
138007	Universal 115/230 VAC, 50/60 Hz battery charger (UK plug standard)	4 lb	\$370.00
138008	Universal 115/230 VAC, 50/60 Hz battery charger (EC plug standard)	4 lb	\$370.00
149549	Universal 115/ 230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000 remote display	3 lb	\$180.00
Sub Hook with Shackle			
Consult	500 to 10,000 lb, 6.5 ton shackle	-	Consult
Consult	20,000 to 30,000 lb, 17 ton shackle	-	Consult
Consult	50,000 lb, 25 ton shackle	-	Consult
Consult	70,000 lb, 40 ton shackle	-	Consult
Consult	100,000 lb, 55 ton shackle	-	Consult
Oversize Lifting Eye/Shackle			
Consult	500 to 10,000 lb capacity	-	Consult
Consult	20,000 to 30,000 lb capacity, adapter with 25 ton shackle	-	Consult
Consult	50,000 to 70,000 lb capacity	-	Consult
Consult	100,000 lb capacity	-	Consult

CRANE SCALES

MSI-4260M Port-A-Weigh

Marine Crane Scale



Standard Features

- LCD display
- IP66 cast aluminum
- Top lifting eye with lower link interface
- Battery operated, six (6) D cell 1.5 V alkaline batteries

Options

(Contact MSI for application consultation)

- Rugged Remote
- RF modem install for connectivity to MSI-8000, MSI-8000HD, MSI-8004HD, TranSend™ and LaserLight2™ remote display. Typically 100 to 300 ft, line of sight; for longer range consult factory.
- Wi-Fi communication is available for specialty applications

Specifications

Power:

Battery operated, six (6) D cell
1.5 V alkaline batteries

Resolution:

Max NTEP Approved Class IIIIL: 5,000 Divisions
Max Non NTEP Approved: 10,000 Divisions

Accuracy:

±(0.1% +1 d) of applied load

Annunciators:

COZ, battery level, net, total, lb/kg, stability, RF and setpoint LEDs

Display:

Five-digit, 1.75 in (44.5 mm) LCD with programmable brightness control

Displayable Units:

Pounds or kilograms selectable

Keys/Buttons:

Power: Turns unit on or off
Zero: Zeros applied load up to 100% of capacity (limited range in NTEP configuration),
Tare: Tares applied load and displays weight in net mode
User: Programmable as test, total, unit, peak hold, net/gross, view total and print

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -20° F to 122° F (-28 °C to 50 °C)

Rating/Material:

IP66 cast aluminum

Design Overload:

200% Safe / 500% Ultimate

Operating Time:

Up to 1,000 hours of battery life with typical use, less with RF modem option

Auto-Off Mode:

Powers off after the scale is not used for the set time (in minutes); 15, 30, 45, 60 or off selectable

Auto Sleep Mode:

Power down during non-use after the set time (in minutes) and powers up with weight change or any key press; 5, 15, 30 or OFF selectable

Service Counters:

Counts number of lifts over percentage of capacity and lifts over capacity

Filtering:

OFF, LO, HI-1 or HI-2 selectable

Radio Link:

802.15.4 at 2.4 GHz

Radio Effective Range:

Typically 100 to 300 ft line of sight

Warranty:

One-year limited

Approvals:

NTEP 19-122
Measurement Canada AM-6198

Approvals



Measurement
Canada
Approved

Part Number/Price

Part #	Description	Resolution	Est. Weight	Price
194593	5,000 lb	1.0 lb (0.5 kg)	58 lb	\$5,750.00
196908	5,000 lb w/RF	1.0 lb (0.5 kg)	58 lb	\$6,075.00

Options/Accessories

Part #	Description	Est. Weight	Price
139381	MSI-8000 RF remote display (requires MSI-4260M with RF modem)	5 lb	\$1,530.00
173014	RF Rugged Remote control (requires MSI-4260M with RF modem)	3 lb	\$375.00
153591	MSI-8000HD remote display, AC power and tilt bracket option (requires MSI-4260M equipped with RF modem)	3 lb	\$1,675.00
178281	MSI-8004HD AC, red/green 85~264 VAC, 47~440 Hz, 120~370 VDC	-	\$1,785.00
159221	Universal crane scale transport cart	180 lb	\$1,425.00
178004	LaserLight2, 4 in (100 mm) six-digit RF scoreboard (requires MSI-4260M equipped with RF modem)	21 lb	\$3,350.00
178006	LaserLight2, 6 in (150 mm) six-digit RF scoreboard (requires MSI-4260M equipped with RF modem)	37 lb	\$3,850.00
176956	Wi-Fi modem option kit (used in MSI-4260, MSI-4260M, MSI-6360, MSI-9600HT)	-	\$490.00

*Please review the Overhead Weighing Safety Guide

CRANE SCALES

MSI-9600HT Hi-torque Port-A-Weigh Plus

Crane Scale

CRANE SCALES



Approvals



Standard Features

- Multi-color LED display
- 12 volt rechargeable battery and universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)
- Shackle is optional and Crosby® fixed hook provided as standard
- Hi-torque load train designed for use with powered rotation

Part Number/Price

Part #	Description	Resolution	Est. Weight	Price
214371	10,000 lb (5000 kg) F/A	2.0 lb (1.0 kg)	62 lb	\$14,400.00
214370	30,000 lb (15,000 kg) F/A	10 lb (5.0 kg)	125 lb	\$14,400.00
214369	70,000 lb (35,000 kg) F/A	20 lb (10 kg)	270 lb	\$20,400.00
214477	100,000 lb (50,000 kg) F/A	20 lb (10 kg)	420 lb	Consult
214474	120,000 lb (60,000 kg) F/A	50 lb (20 kg)	550 lb	Consult
214479*	200,000 lb (100,000 kg) F/A	100 lb (50 kg)	1,100 lb	Consult

* 400% Ultimate overload

Options/Accessories

Part #	Description	Est. Weight	Price
144126	Top lifting shackle 9.5 ton for 10,000 lb cap unit	-	Consult
141992	Top lifting shackle Crosby® G2130 17 ton for 30,000 lb cap unit	-	Consult
146335	Top lifting shackle Crosby® G2140 40 ton for 70,000 lb cap unit	-	Consult
146336	Top lifting shackle Crosby® G2140 55 ton for 120,000 lb cap unit	-	Consult
150971	MSI RF modem option kit (used in MSI-4260, MSI-4260M, MSI-9600HT)	3 lb	\$265.00
173014	RF Rugged Remote control (requires MSI-9600HT with RF modem)	3 lb	\$375.00
153591	MSI-8000HD RF remote display AC powered (no A/D)	180 lb	\$1,675.00
178004	LaserLight2, 4 in (100 mm) six-digit RF scoreboard	21 lb	\$3,350.00
178006	LaserLight2, 6 in (150 mm) six-digit RF scoreboard	37 lb	\$3,850.00
159221	Universal crane scale transport cart	-	\$1,425.00
Consult	AC direct power supply	-	\$560.00
Consult	Anti-heat shield	-	\$1,125.00
Consult	Audible alarm	-	\$420.00
176956	Wi-Fi modem option kit (used in MSI-4260, MSI-4260M, MSI-6360, MSI-9600HT)	-	\$490.00
219713	Retrofit kit	-	\$2,700.00
Accessories			
150367	Battery assembly, 12 V rechargeable	7 lb	\$170.00
138006	Universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)	4 lb	\$360.00
138007	Universal 115/230 VAC, 50/60 Hz battery charger (UK plug standard)	4 lb	\$370.00
138008	Universal 115/230 VAC, 50/60 Hz battery charger (EC plug standard)	4 lb	\$370.00

*Please review the Overhead Weighing Safety Guide

Options

(Contact MSI for application consultation)

- Top shackle
- Rugged Remote
- Anti-heat shielding
- Substitute bottom hook with shackle
- Oversized top or shackle
- Oversized bottom hooks
- Universal direct power supply
- Wi-Fi communication
- RF modem install for connectivity to MSI-8000, MSI-8000HD RF, MSI-8004HD RF remote display, TranSend™ and LaserLight2™ remote display
- Typically 100 to 300 ft, line of sight; for longer range consult factory
- Low headroom top adapter
- Audible alarm
- Custom top and bottom interfaces

Specifications

Power:

12 V rechargeable battery, 115/230 VAC battery charger included

Resolution:

2,400 to 5,000 d standard
(Up to 10,000 d available)

Accuracy:

10,000 to 120,000 lb: ± (0.1% +1 d) of capacity
200,000 lb: ± (0.2% +1 d) of capacity

Display:

1.5 in (38 mm, 6-digit, programmable LED display, multi-color (red, orange, and green)

Displayable Units:

Pounds or kilograms selectable

Keys/Buttons:

Power: Turns unit on or off
Zero: Zeros applied load up to 100% of capacity
Tare: Tares applied load and displays weight in net
Mode F1: Programmable as test, units, net/gross, total and peak hold

Temperature:

Operating: 14 °F to 131 °F (-10 °C to 55 °C)

Rating/Material:

NEMA Type 4, IP66, marine grade 356 alloy anodized cast aluminum

Design Overload:

200% Safe / 500% Ultimate (except where noted)

Operating Time:

Up to 250 hours w/o radio
Up to 75 hours w/ radio

Auto-Off Mode:

Powers off after the scale is not used for the set time (in minutes); 15, 30, 45, 60 or off selectable

Auto Sleep Mode:

Power down during non-use after the set time (in minutes) and powers up with weight change or any key press; 5, 15, 30 or OFF selectable

Service Counters:

Counts number of lifts over percentage of capacity and lifts over capacity

Filtering:

OFF, LO, HI-1 or HI-2 selectable

Radio Link:

802.15.4 at 2.4 GHz

Radio Link Effective Range:

Typically 100 to 300 ft line of sight

Warranty:

One-year limited

Approvals:

NOM

MSI-6360 Trans-Weigh

Crane Scale



Approvals



Standard Features

- 12-volt rechargeable battery and universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)
- Top lifting eye or shackle with Crosby® (or equivalent) 360° thrust-bearing swivel hook
- RF modem install for connectivity to MSI-8000, MSI-8000HD RF, MSI-8004HD RF remote display, TranSend™ and LaserLight2™ remote display. Typically, 100 to 300 ft, line of sight; for longer range consult factory.
- Meets or exceeds OSHA, ANSI, ASME and other safety design standards (5:1 Ultimate Safety Factor)

Part Number/Price

Part #	Description	Resolution	Est. Weight	Price
215829	500 lb (250 kg) F/A	0.2 lb (0.1 kg)	53 lb	\$6,150.00
215830	2,000 lb (1000 kg) F/A	1.0 lb (0.5 kg)	53 lb	\$6,150.00
215831	5,000 lb (2500 kg) F/A	1.0 lb (0.5 kg)	62 lb	\$6,100.00
215832	10,000 lb (5000 kg) F/A	2.0 lb (1.0 kg)	62 lb	\$6,675.00
215833	20,000 lb (10,000 kg) F/A	5.0 lb (2.0 kg)	105 lb	\$7,725.00
215834	30,000 lb (15,000 kg) F/A	10 lb (5.0 kg)	125 lb	\$7,825.00
215835	50,000 lb (25,000 kg) F/A	10 lb (5.0 kg)	235 lb	\$15,600.00
215836	70,000 lb (35,000 kg) F/A	20 lb (10 kg)	270 lb	\$22,500.00
215837	100,000 lb (50,000 kg) F/A	20 lb (10 kg)	420 lb	\$33,100.00

*Please review the Overhead Weighing Safety Guide

Options

(Contact MSI for application consultation)

- Anti-heat shielding for high-temperature applications
- Rugged Remote
- Substitute bottom swivel hook with shackle
- Oversized top lifting eye or shackle
- Oversized bottom hook
- Low headroom top adapter
- Universal direct power supply; 85 to 265 VAC, 47 to 440 Hz/130 to 300 VDC
- Wi-Fi communication
- Custom top and bottom interfaces
- Crane scale cart

Specifications

Power:

12 V rechargeable battery, 115/230 VAC battery charger included

Resolution:

3,000 to 5,000 d standard
(Up to 10,000 d available)

Accuracy:

± (0.1% +1 d) of capacity

Displayable Units:

Pounds or kilograms selectable

Keys/Buttons:

On/Off

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -40 °F to 176 °F (-40 °C to 80 °C)

Rating/Material:

NEMA Type 4, IP66, marine grade 356 alloy anodized cast aluminum

Design Overload:

200% Safe/500% Ultimate

Operating Time:

Up to 75 hours between charging with typical use

Radio Link:

802.15.4 at 2.4 GHz

Radio Link Effective Range:

Typically 100 to 300 ft line of sight

Calibration:

Digital via MSI ScaleCore remote device

Warranty:

One-year limited

Approvals:

NTEP 19-122: 500 to 70,000 lb

CRANE SCALES

MSI-6360 Trans-Weigh

Crane Scale

Options/Accessories

Part #	Description	Est. Weight	Price
144773	MSI RF Module, XBEE-PRO 802.15.4		\$155.00
139381	MSI-8000 RF remote display	5 lb	\$1,530.00
173014	Rugged Remote control	3 lb	\$375.00
153591	MSI-8000HD RF remote display AC powered (no A/D)	4 lb	\$1,675.00
178281	MSI-8004HD AC, red/green 85~264 VAC, 47~440 Hz, 120~370 VDC	-	\$1,785.00
178004	4 in LaserLight2 MSI RF	21 lb	\$3,350.00
178006	6 in LaserLight2 MSI RF	37 lb	\$3,850.00
159221	Universal crane scale transport cart	180 lb	\$1,425.00
175308	Wi-Fi Modem 802.11 b/g		\$155.00
Consult	AC power supply	-	\$560.00
Consult	Anti-heat shield	-	\$1,125.00
Consult	Audible alarm	-	\$420.00
219666	Retrofit kit	5 lb	\$3,000.00
150367	Battery assembly, 12 volt rechargeable	7 lb	\$170.00
138006	Universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)	4 lb	\$360.00
138007	Universal 115/230 VAC, 50/60 Hz battery charger (UK plug standard)	4 lb	\$370.00
138008	Universal 115/230 VAC, 50/60 Hz battery charger (EC plug standard)	4 lb	\$370.00
Sub Hook with Shackle			
Consult	500 to 10,000 lb, 6.5 ton shackle	-	Consult
Consult	20,000 to 30,000 lb, 17 ton shackle	-	Consult
Consult	50,000 lb, 25 ton shackle	-	Consult
Consult	70,000 lb, 40 ton shackle	-	Consult
Consult	100,000 lb, 55 ton shackle	-	Consult
Oversize Lifting Eye/Shackle			
Consult	500 to 10,000 lb capacity	-	Consult
Consult	20,000 to 30,000 lb capacity, adapter with 25 ton shackle	-	Consult
Consult	50,000 to 70,000 lb capacity	-	Consult
Consult	100,000 lb capacity	-	Consult

CRANE SCALES

Crane Scale Cart

Universal Transport and Storage Cart



Standard Features

- Designed to hold MSI-4260, MSI-4260IS, MSI-4260M, MSI-4300, MSI-9600HT, MSI-6360
- Four swivel castors with brake
- Powder coated mild steel

Specifications

Warranty:

One-year limited

Part Number/Price

Part #	Description	Est. Weight	Price
159221	Universal MSI Crane Scale Cart	180 lb	\$1,425.00
Consult	Modified versions of universal MSI Crane Scale Cart	-	Consult

CRANE SCALES

MSI-7300 Dyna-Link 2

Digital Tension Dynamometer



Shown with optional shackles

CRANE SCALES

Part Number/Price

Part #	Description	Resolution	Est. Weight	Price
139162	1,000 lb (500 kg) F/A	0.5 lb (0.2 kg)	8 lb	\$1,730.00
139163	2,500 lb (1,250 kg) F/A	1 lb (0.5 kg)	9 lb	\$1,730.00
139164	5,000 lb (2,500 kg) F/A	2 lb (1.0 kg)	9 lb	\$1,730.00
139165	10,000 lb (5,000 kg) F/A	5 lb (2.0 kg)	11 lb	\$1,860.00
139166	25,000 lb (12,500 kg) F/A	10 lb (5 kg)	19 lb	\$2,500.00
139167	50,000 lb (25,000 kg) F/A	20 lb (10 kg)	29 lb	\$3,210.00
139168*	100,000 lb (50,000 kg) F/A	50 lb (20 kg)	65 lb	\$4,200.00
Optional Configurations (for connectivity to MSI-8000 RF Remote Display) F/A				
139441	1,000 lb (500 kg) RF module	0.5 lb (0.2 kg)	8 lb	\$1,960.00
139442	2,500 lb (1,250 kg) RF module	1 lb (0.5 kg)	9 lb	\$1,960.00
139443	5,000 lb (2,500 kg) RF module	2 lb (1 kg)	9 lb	\$1,960.00
139444	10,000 lb (5,000 kg) RF module	5 lb (2 kg)	11 lb	\$2,090.00
139445	25,000 lb (12,500 kg) RF module	10 lb (5 kg)	19 lb	\$2,670.00
139446	50,000 lb (25,000 kg) RF module	20 lb (10 kg)	29 lb	\$3,410.00
139447*	100,000 lb (50,000 kg) RF module	50 lb (20 kg)	65 lb	\$4,400.00
159168*	120,000 lb (60,000 kg) RF module includes MSI-8000	50 lb (20 kg)	57 lb	Consult
159169*	180,000 lb (90,000 kg) RF module includes MSI-8000	100 lb (50 kg)	74 lb	Consult
159170*	260,000 lb (130,000 kg) RF module includes MSI-8000	100 lb (50 kg)	100 lb	Consult
159171*	380,000 lb (190,000 kg) RF module includes MSI-8000	200 lb (100 kg)	169 lb	Consult
159172**	550,000 lb (275,000 kg) RF module includes MSI-8000	200 lb (100 kg)	336 lb	Consult
Wi-Fi				
176813	1,000 lb (500 kg) F/A with Wi-Fi	0.5 lb (0.2 kg)	8 lb	\$1,950.00
176814	2,500 lb (1,250 kg) F/A with Wi-Fi	1 lb (0.5 kg)	9 lb	\$2,050.00
176815	5,000 lb (2,500 kg) F/A with Wi-Fi	2 lb (1.0 kg)	9 lb	\$2,050.00
176816	10,000 lb (5,000 kg) F/A with Wi-Fi	5 lb (2.0 kg)	11 lb	\$2,175.00
176817	25,000 lb (12,500 kg) F/A with Wi-Fi	10 lb (5 kg)	19 lb	\$2,800.00
176818	50,000 lb (25,000 kg) F/A with Wi-Fi	20 lb (10 kg)	29 lb	\$3,625.00
176819	100,000 lb (50,000 kg) F/A with Wi-Fi	50 lb (20 kg)	65 lb	\$4,625.00
176827	120,000 lb (60,000 kg) F/A with Wi-Fi	50 lb (20 kg)	57 lb	Consult
176828	180,000 lb (90,000 kg) F/A with Wi-Fi	100 lb (50 kg)	74 lb	Consult
176829	260,000 lb (130,000 kg) F/A with Wi-Fi	100 lb (50 kg)	100 lb	Consult
176830	380,000 lb (190,000 kg) F/A with Wi-Fi	200 lb (100 kg)	169 lb	Consult
176831	550,000 lb (275,000 kg) F/A with Wi-Fi	200 lb (100 kg)	336 lb	Consult

* 500% Ultimate overload

** 440% Ultimate overload

*Please review the Overhead Weighing Safety Guide

Standard Features

- LCD display
- Two C-cell alkaline batteries for capacities up to 10,000 lb (5,000 kg)
- Two D-cell alkaline batteries for capacities 25,000 lb (12,500 kg) and above

Options

(Contact MSI for application consultation)

- Crosby® top and bottom shackles
- Portable transport case
- Serial output cable
- Rugged Remote (control for On/Off, Zero, Tare and other functions)
- RF modem install for connectivity to MSI-8000, MSI-8000HD RF, MSI-8004HD RF remote display and Transend™. Typically 100 to 300 ft, line of sight, for longer range consult factory.
- Audible alarm

Specifications

Power:

Two each C-cell alkaline batteries for capacities up to 10,000 lb; two each D-cell alkaline batteries for capacities 25,000 to 550,000 lb

Accuracy:

0.1% FS of rated capacity (up to 100,000 lb)
0.5% FS of rated capacity (120,000 lb and above)

LED Annunciators:

Function 1, function 2, setpoint 1, setpoint 2

LCD Annunciators:

Net, center of zero, stable, battery test, peak hold, total

Display:

5-digit, 1.22 in (31 mm) tall, LCD - 50,000 lb and lower
6-digit, 1.00 in (25 mm) tall, LCD - 100,000 lb and higher

Displayable Units:

Pounds, kilograms, kilonewtons, tons, metric tons

Keys/Buttons:

On/Off, zero, hi-speed peak hold, setpoints, total, tare, auto-off, motion filter

Temperature:

Operating:
-4 °F to 140 °F (-20 °C to 60 °C)

Rating/Material:

NEMA Type 4, IP65, anodized corrosion-resistant finish
2024 aircraft grade aluminum
100,000 lb and above: Zinc plated, 4340 mild steel

Design Overload:

200% Safe/700% Ultimate* (except where noted)

Operating Time:

From 150 to 300 hours in typical use depending on unit capacity and battery configuration.
Approximately 25 to 30 hours with optional RF modem link installed.

Filtering:

OFF, LO, HI selectable

Data Output:

Serial RS-232

Warranty:

Two-year limited

MSI-7300 Dyna-Link 2

Digital Tension Dynamometer

Options/Accessories

Part #	Description	Est. Weight	Price
151357*	Shackle anchor, bolt type 3.25 ton for 500 to 5,000 lb unit	2 lb	Consult
151355*	Shackle anchor, bolt type 6.5 ton for 10,000 lb unit	3 lb	Consult
141992*	Shackle anchor, bolt type 17 ton for 25,000 lb unit	20 lb	Consult
151356*	Shackle anchor, bolt type 25 ton for 50,000 lb unit	32 lb	Consult
146336*	Shackle anchor, bolt type 55 ton for 100,000 lb unit	52 lb	Consult
151359*	Shackle anchor, bolt type 85 ton for 180,000 lb unit	103 lb	Consult
151360*	Shackle anchor, bolt type 120 ton for 260,000 lb unit	113 lb	Consult
151361*	Shackle anchor, bolt type 175 ton for 380,000 lb unit	333 lb	Consult
151358*	Shackle anchor, bolt type 250 ton for 550,000 lb unit	650 lb	Consult
139381	MSI-8000 RF remote display (requires MSI-4260 with RF modem)	5 lb	\$1,530.00
153591	MSI-8000HD RF remote display, A/C powered with tilt stand (requires MSI-7300 with optional RF modem)	5 lb	\$1,675.00
165313	Heavy-duty transport case with precision cut. Heavy duty foam for units up to 10,000 lb capacity	10 lb	\$470.00
145076	Transport crate for 25,000 lb and 50,000 lb capacity unit	35 lb	\$625.00
145073	Transport crate for 100,000 lb capacity unit	42 lb	Consult
139470	RS-232 serial cable for MSI-7300	1 lb	\$180.00
178004	LaserLight2, 4 in (100 mm) six-digit RF scoreboard (requires MSI-7300 equipped with optional RF modem)	21 lb	\$3,350.00
178006	LaserLight2, 6 in (150 mm) six-digit RF scoreboard (requires MSI-7300 equipped with optional RF modem)	37 lb	\$3,850.00
149549	Universal 115/ 230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000 remote display	3 lb	\$180.00
173014	Rugged Remote control (requires MSI-7300 equipped with optional RF modem)	3 lb	\$375.00
150964	RS-232 13 ft (4 m) serial cable for MSI-8000	1 lb	\$220.00
139438	Audible setpoint (not available with MSI-7300RF or MSI-7300WiFi)	-	\$460.00
149550	Battery charger for MSI-8000 EC plug	-	\$180.00

* 2 shackles will be needed per 7300

CRANE SCALES

MSI Dyna-Clamp

Tension Meter

CRANE SCALES



Approvals



Part Number/Price

Part #	Description	Tension	Est. Weight	Price
189581	MSI Dyna-Clamp tension meter	12,500 lbf (5,670 kgf / 55.60 kN)	15 lb	\$5,250.00

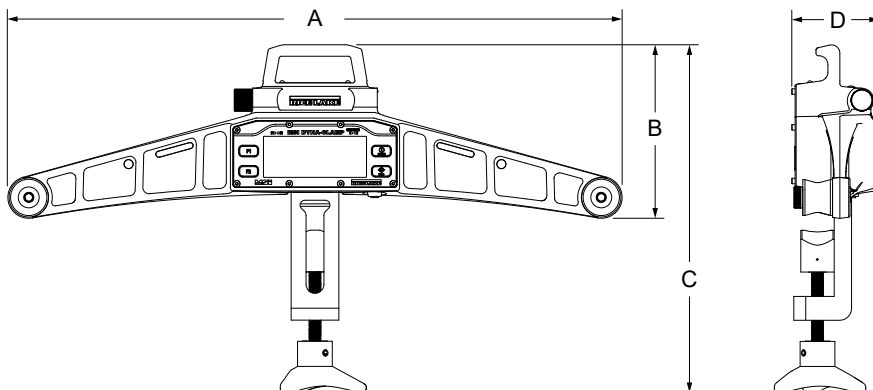
Options/Accessories

Part #	Description	Price
198418	Heavy-duty carrying case	\$700.00

Dimensions

MSI Dyna-Clamp			
A	25.70 in (652.80 mm)	C	13.75 to 15.50 in (349.25 to 393.70 mm)
B	7.30 in (185.50 mm)	D	3.70 in (94 mm)

*Please review the Overhead Weighing Safety Guide



Standard Features

- Dual line LCD display
- Two user-programmable function keys
- IP65 anodized aluminum frame
- RS-232 port
- Up to eight factory calibrations included at no additional cost

Options

(Contact MSI for application consultation)

- Heavy-duty carrying case

Specifications

Power:

Battery operated two AA cells 1.5 V alkaline batteries (can be replaced with rechargeable NiMH cells)

Resolution:

Standard: 2,500 divisions

Accuracy:

±3% of capacity

Display:

Primary display (bottom) six, 0.7 in (18 mm) numeric digits

Secondary display (top) eight, 0.5 in (13 mm) numeric digits

Displayable Units:

lbf, kgf, kN

Keys/Buttons:

Two programmable keys (user-defined) – F1, F2 (test, unit, print, scroll, actfun)

Two permanent keys – power, zero

Temperature:

Operating:
-4 °F to 122 °F (-20 °C to 50 °C)

Rating/Material:

IP65 powder-coated aluminum frame

Operating Time:

Alkaline AA-cells: 24 hours

Auto-Off Mode:

Prolongs battery life by turning power OFF after 15, 30, 45 or 60 minutes of no activity (user determined)

Setpoints:

Two dedicated setpoints for minimum and maximum allowable wire rope tension (LEDs for measurements outside of allowable range)

Wire Rope:

Diameter 3/16 in (5 mm) to 1 in (25 mm)

Max Tension:

12,500 lbf (5,670 kgf / 55.60 kN)

Operator Use:

Outdoor

Storage:

Indoor

Calibration:

Up to eight factory-programmed wire rope calibrations

Warranty:

Two-year limited

Approvals:

CE Marked
UKCA



Part Number/Price

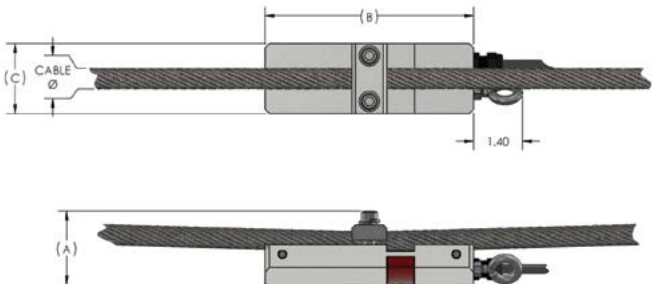
Part #	Description	Price
225957	MSI Clamp-On kit: load cell (PN 179080), MSI-7000, MSI-8000, factory setup	\$3,840.00
225958	MSI Clamp-On kit: load cell (PN 179082), MSI-7000, MSI-8000, factory setup	\$4,090.00
179080	Load cell assembly Clamp-On for 3/8 to 1/2 in wire rope	\$810.00
179082	Load cell assembly Clamp-On for 9/16 to 3/4 in wire rope	\$940.00
188816	Kit with SCT-2200 for 3/8 to 1/2 in wire rope	\$1,415.00
188817	Kit with SCT-2200 for 9/16 to 3/4 in wire rope	\$1,565.00

Larger diameter clamp ons available - call for pricing

Dimensions

Cable Range	P/N	A	B	C
3/8 - 1/2	179080	Cable + 1.70	6.00	2.00
9/16-3/4	179082	Cable + 1.67	6.00	2.00

*8mm cable can be used with PN 179080



Standard Features

- A durable solution for measuring wire rope tension and preventing overloads for cranes and hoists. Available in two envelopes for accommodating the most common wire ropes. With the SCT-2000, weight-based setpoints can provide the operator alerts and safety shut-offs based on unsafe load conditions.

Options

(Contact MSI for application consultation)

- Custom sizes available on request
- Pair with an SCT transmitter for basic safety functions

Specifications

Rating/Material:

4340 steel, zinc plated IP68

Output Resistance:

350 ohm

System Accuracy of Calibrated Capacity:

3 to 5%

Cable Length:

20 ft integral cable with blunt end termination

Cable Color Code:

Red +Excitation
Black –Excitation
Green +Signal
White –Signal



Optional SCT-2200 transmitter



Standard Features

- Customized for individual integrated solutions where it will be permanently installed to monitor loads and overloading protection. Machined from 17-4 stainless steel ensures safety, strength and corrosion resistance.

(Contact MSI for application consultation)

CRANE SCALES

For most overhead weighing applications, traditional scales are an ideal solution. However, applications with limited to no headroom require specialty equipment beyond even reduced-height or low-profile crane scales.

One such solution is an MSI load pin sensor. A load pin sensor is a type of load cell that directly replaces clevis, pivot, normal shaft or equalizer pins. Load pin sensors are designed to be permanently installed, so they can continuously monitor vertical or horizontal tension. An integrated load pin provides load monitoring and overload protection without impacting headroom to promote safety and to prevent costly equipment damage.

Rice Lake's industry leading engineers design and manufacture custom load pin sensors for any application. Every load pin is constructed from stainless steel for safety, strength (minimum 5:1) and corrosion resistance.

To receive a quote for a load pin sensor, complete the load pin questionnaire on page 169 or online at www.ricelake.com/questionnaires. For further assistance, contact an MSI overhead weighing specialist.



Standard Features

- Designed to be placed above the trunnion of a load block, this integrated low-profile load cell eliminates headroom loss
- Off-axis compensation

(Contact MSI for application consultation)

Specifications

Accuracy (Static Load):

0.5 to 1% system accuracy of rated capacity

Rating/Material:

4340 alloy steel, zinc plated
IP67

Resistance:

700 ohm

Part Number/Price

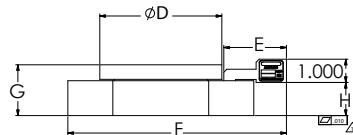
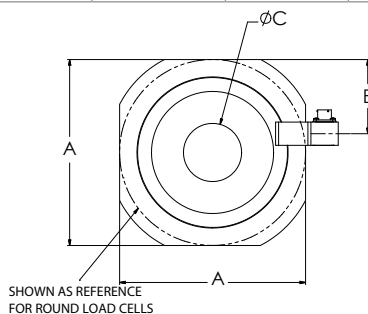
Part #	Description	Est. Weight	Price
160651	10,000 lb/5,000 kg capacity	5 lb	Consult
163595	20,000 lb/10,000 kg capacity	10 lb	Consult
163596	40,000 lb/20,000 kg capacity	20 lb	Consult
163829	60,000 lb/30,000 kg capacity	30 lb	Consult
163597	80,000 lb/40,000 kg capacity	34 lb	Consult
163598	100,000 lb/50,000 kg capacity	38 lb	Consult
159550	120,000 lb/60,000 kg capacity	60 lb	Consult
163599	160,000 lb/80,000 kg capacity	105 lb	Consult
163600	200,000 lb/100,000 kg capacity	215 lb	Consult

Options/Accessories

Part #	Description	Price
165978	Load cell to MSI-7001 interface cable, 6.5 ft	\$345.00
165979	Load cell to MSI-7001 interface cable, 10 ft	\$365.00
165980	Load cell to MSI-7001 interface cable, 16 ft	\$400.00
165989	Load cell to MSI-7001 interface cable, 20 ft	\$430.00
165990	Load cell to MSI-7001 interface cable, 25 ft	\$460.00
165991	Load cell to MSI-7001 interface cable, 32 ft	\$535.00
55417	Connector, cable plug with strain relief	\$42.00

Dimensions

Part #	Capacity	A	B	C (+0.005- 0.000)	D	E	F	G	H	Required Hook Shank Diameter (+0.000,-0.005)
160651	10,000 lb	3.500 in	1.350 in	1.005 in	2.450 in	1.880 in	4.905 in	1.500 in	1.000 in	1.000 in
163595	20,000 lb	6.000 in	2.500 in	1.505 in	3.500 in	2.443 in	7.405 in	1.750 in	1.250 in	1.500 in
163596	40,000 lb	7.500 in	3.150 in	2.005 in	5.000 in	2.580 in	8.905 in	2.000 in	1.375 in	2.000 in
163829	60,000 lb	8.000 in	3.190 in	2.505 in	5.250 in	2.695 in	9.405 in	2.188 in	1.500 in	2.500 in
163597	80,000 lb	8.500 in	3.650 in	3.505 in	5.750 in	2.680 in	9.905 in	2.313 in	1.500 in	3.500 in
163598	100,000 lb	9.125 in	3.873 in	4.005 in	7.000 in	2.382 in	10.530 in	2.668 in	1.875 in	4.000 in
159550	120,000 lb	9.125 in	3.873 in	4.005 in	7.000 in	2.382 in	10.530 in	2.813 in	2.000 in	4.000 in
163599	160,000 lb	16.000 in	7.030 in	6.005 in	14.500 in	2.955 in	17.405 in	4.625 in	2.500 in	6.000 in
163600	200,000 lb	16.000 in	7.030 in	6.005 in	14.500 in	2.955 in	17.405 in	5.125 in	3.000 in	6.000 in



MSI Tension Link

Load Cell



Standard Features

- Integrates between a crane block and lifting equipment to provide force measurement for lifted items. This is an ideal solution for crane weighing and features a 7:1 safety factor for compliance with industrial and military safety requirements.

Options

(Contact MSI for application consultation)

- Top lifting eye or shackle with Crosby® (or equivalent) 360° thrust-bearing swivel hook

Specifications

Accuracy:

0.1% sensor accuracy

Rating/Material:

4340 steel

Full Scale Output:

0.8 mV/V

Output Resistance:

2,000 ohm

Input Resistance:

1,500 ohm

Connector Pin Out:

A: EX +
B: Sig +
C: Sig -
D: EX -

Part Number/Price

Part #	Description	Price
181907	2 K 7200 style load cell only	Consult
181908	5 K 7200 style load cell only	Consult
181909	10 K 7200 style load cell only	Consult
178093	25 K 7200 style load cell only	Consult
178094	50 K 7200 style load cell only	Consult
181910	100 K 7200 style load cell only	Consult

Contact factory for higher capacities

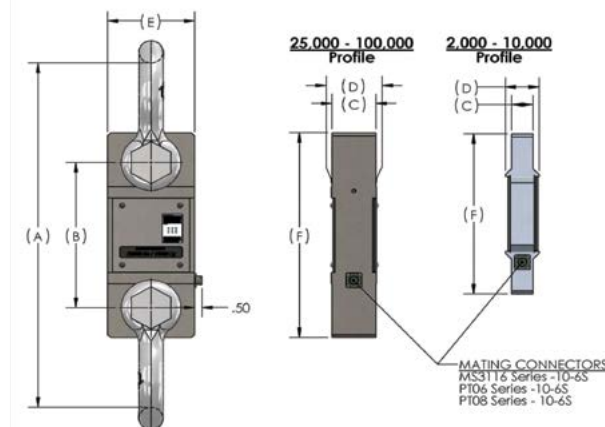
Options/Accessories

Part #	Description	Price
165978	Load cell to MSI-7001 interface cable, 6.5 ft	\$345.00
165979	Load cell to MSI-7001 interface cable, 10 ft	\$365.00
165990	Load cell to MSI-7001 interface cable, 25 ft	\$460.00
134505	Load cell mating cable to bare wires, 10 ft	\$210.00

Dimensions

Capacity (lbs)	P/N	Load Cell Material	(A) Headroom Loss	(B) C-C Length	(C) Lug Thk	(D) Body Thk	(E) Body Width	(F) Body Length	Lug Hole	Crosby Shackle
2,000	181907	Aluminum	13.50 in	8.00 in	0.99 in	2.13 in	4.50 in	9.75 in	0.78 in	3-1/4 T 151357
5,000	181908	Aluminum	13.50 in	8.00 in	0.99 in	2.13 in	4.50 in	9.75 in	0.78 in	3-1/7 T 151357
10,000	181909	Aluminum	16.13 in	8.50 in	1.35 in	2.13 in	5.37 in	10.75 in	1.05 in	6-1/2 T 151355
25,000	178093	Steel	22.39 in	9.26 in	2.24 in	2.24 in	4.80 in	12.76 in	1.67 in	17 T 141992
50,000	178094	Steel	25.74 in	9.76 in	2.74 in	2.81 in	5.43 in	13.76 in	2.05 in	25 T 151356
100,000	181910	Steel	28.49 in	10.74 in	3.09 in	3.09 in	6.86 in	15.74 in	2.30 in	55 T 146336

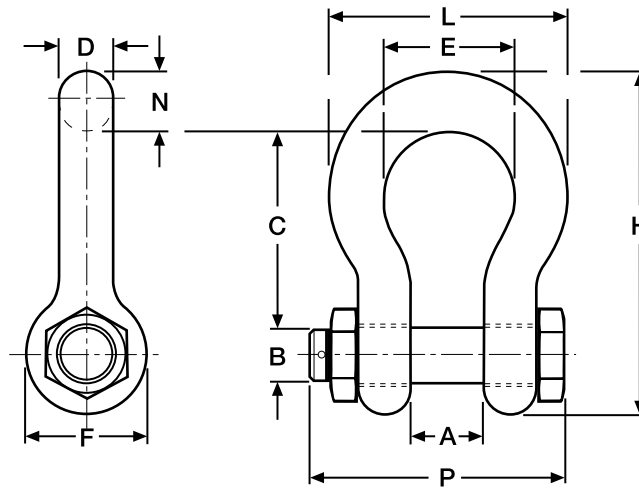
*Please review the Overhead Weighing Safety Guide



Shackle Dimensions

Part Number/Price

Part #	W.L.L. Tons	Size	A	B	C	D	E	F	H	L	N	P	Weight	Price
151357	3 1/4	0.63in	1.06in	.75in	2.38in	0.63in	1.69in	1.56in	4.22in	2.94in	0.69in	N/A	1.58 lb	Consult
151355	6 1/2	0.88in	1.44in	1.00in	3.31in	0.88in	2.28in	2.13in	5.75in	4.03in	0.97in	5.00in	3.95 lb	Consult
141992	17	1.50in	2.38in	1.63in	5.75in	1.50in	3.88in	3.63in	9.88in	6.88in	1.62in	8.25in	19.50 lb	Consult
151356	25	1.75in	2.88in	2.00in	7.00in	1.75in	5.00in	4.32in	11.88in	8.50in	2.12in	9.59in	31.30 lb	Consult
146334	30	1.50in	2.38in	1.63in	5.75in	1.50in	3.88in	3.63in	9.88in	6.88in	1.62in	8.25in	20.80 lb	Consult
146335	40	1.75in	2.88in	2.00in	7.00in	1.75in	5.00in	4.32in	11.88in	8.50in	2.12in	9.59in	33.91 lb	Consult
146336	55	2.00in	3.25in	2.25in	7.75in	2.00in	5.75in	5.00in	13.38in	9.75in	2.00in	11.00in	51.75 lb	Consult
151359	85	2.5in	4.12in	2.75in	10.50in	2.72in	7.25in	5.69in	17.84in	12.87in	3.12in	13.58in	96.00 lb	Consult
151360	120	3.00in	5.00in	3.25in	13.00in	3.00in	7.88in	6.50in	21.50in	14.50in	3.63in	16.50in	178.00 lb	Consult
83455	120	3in	5.00in	3.25in	13.00in	3.11in	7.88in	6.50in	21.50in	14.36in	3.63in	15.13in	178.00 lb	Consult
151361	175	4.00in	5.50in	4.25in	14.50in	4.00in	10.00in	9.00in	25.69in	18.38in	4.56in	19.75in	338.00 lb	Consult
151358	250	4in	8.50in	5.00in	20.00in	4.50in	13.00in	12.00in	35.00in	24.50in	6.50in	22.68in	600.00 lb	Consult
Oversized Shackles														
148497	40	1.75in	2.88in	2.00in	10.00in	2.25in	6.00in	4.32in	15.35in	10.50in	2.25in	9.00in	45.00 lb	Consult
148393	40	2.25in	2.88in	2.00in	12.50in	2.25in	8.00in	4.32in	17.85in	12.50in	2.25in	10.00in	90.00 lb	Consult
148394	50	2.00in	3.25in	2.25in	12.25in	2.50in	8.00in	5.00in	18.50in	13.00in	2.50in	11.00in	72.00 lb	Consult
Shims														
146534	(For use with 50,000 to 70,000 ton systems)													Consult



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Product names, logos, brands and other trademarks featured
or referred to within this publication are the property of their respective trademark holders.

1280 Enterprise™ Series

Programmable Digital Weight Indicator



Approvals



Measurement
Canada
Approved



Standard Features

- Customizable color touchscreen with graphical user interface
- User-defined softkeys, icons and graphics
- Tactile keypad for scale operations, numeric entry and navigation
- On-screen keyboard available during entry mode (or external keyboard)
- Built-in web server for remote access, systems integration and data monitoring
- Multi-language operation and text entry
- Supports eight scales within five different kinds:
 - Analog load cell, multi-range/interval weighing
 - Total scale summing
 - Serial input scales
 - iQUBE²® and iQUBE³ scales
 - Program scales
- Six smart card slots for additional scale channels, serial ports, digital inputs and outputs, analog outputs and protocol interfaces
- iRite™ Programming Software
 - Five built-in applications: Truck In/Out, recipe storage, filling/dosing, counting, checkweighing
 - Customizable user programs with event-based functions
 - 150 built-in functions for common processes and data tables
 - Customize and transfer data via email, FTP server and networked printers
 - Display data with line charts or bar graphs
 - iRite reporting of iQUBE² and iQUBE³ alerts
- Email, USB, Ethernet TCP/IP, Wi-Fi Direct®, two serial ports RS-232 or RS-485
- Alibi memory captures serial port transmissions
- Four configurable data-stream formats for PC, printers and remote displays
- 100 setpoints, 18 configurable setpoint types
- Eight digital I/O for control and pulse count
- Three different enclosure types: universal with tilt stand, panel mount and wall mount

Specifications

Power:

AC voltages: 100 to 240 VAC; 50/60 Hz
DC voltages: 11 to 30 VDC

Power Consumption:

60 W

Excitation Voltage:

10 VDC (± 5 VDC)
16 × 350 ohm or 32 × 700 ohm load cells per A/D card

Analog Signal Input Range:

-60 mV to 60 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum at 7.5 Hz to 120 Hz
1.0 µV/graduation recommended

A/D Sample Rate:

7.5 to 960 Hz, software selectable

Resolution:

Internal: 8,000,000 counts
Display: 1,000,000

System Linearity

± 0.01% full scale

Digital I/O:

Eight I/O channels on CPU board
Optional 24-channel I/O expansion boards

Communication Ports:

Port 1 & 2: Full duplex RS-232 with CTS/RTS, RS-422/485
Baud rate: 1200 to 115200
Port 3: USB 2.0 Device (Micro)
USB host: (2) Type A connectors max 500 mA
Ethernet: Wired 10/100 Auto-MDX
Ethernet: Wireless 802.11 b/g/n 2.4GHz

Onboard:

Selectable filters: Three stage, Adaptive or Damping
Embedded Linux® OS
8 GB eMMC (system use)
1 GB DDR3 RAM
460 MB onboard database (SQLite) storage
Up to 32 GB micro SD card (sold separately)

Display:

Seven-inch, 800 × 480 pixel, 500 or 1,000 NIT
Twelve-inch, 1280 × 800 pixel, 1,500 NIT

Keys/Buttons:

22-key membrane panel, tactile buttons, on-screen keyboard for text and numeric entry, USB port for flash drive, keyboard and printer

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 131 °F (-20 °C to 55 °C)

Rating/Material:

Universal: IP69K
Wall Mount: IP66
Panel Mount: IP69K, NEMA Type 4X and 12
Stainless steel 304 enclosure

Weight:

Universal enclosure: 11 lb (4.9 kg)
Panel mount enclosure: 8 lb (3.6 kg)
Wall mount enclosure: 23 lb (10.4 kg)
Panel mount 7 in touch-only: 7 lb (3.1 kg)
Panel mount 12 in touch-only: 10 lb (4.5 kg)

Warranty:

Two-year limited

EMC Immunity:

10 V/m

Approvals:

NTEP 15-001/Class III/IIIL 10,000 d
Measurement Canada AM-5980C,
Class III/IIIL HD 10,000 d
OIML R76/2006-A-NL1-19.23 Class III/IIIL 10,000 d
OIML R61-1/2017 TC8596
cULus Listed (Universal, Wall Mount)
cULus Recognized (Panel Mount)
CE Marked

1280 Enterprise™ Series

Programmable Digital Weight Indicator



7-inch model with keypad

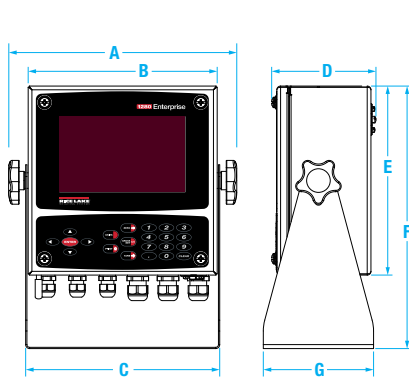


7-inch touch-only model

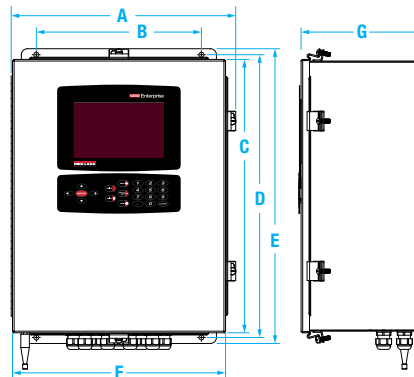


12-inch touch-only model

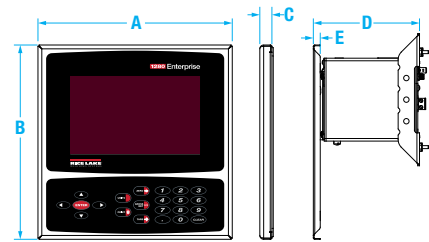
Numeric Keypad Models:



1280-2



1280-3



1280-4

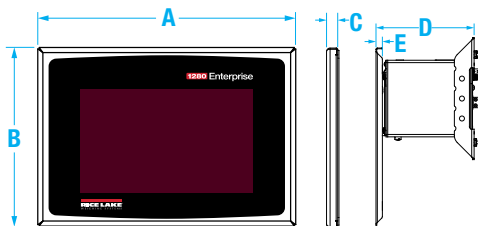
Dimensions

Universal (1280-2)			
A	10.86 in (276 mm)	E	9.00 in (229 mm)
B	9.00 in (229 mm)	F	12.50 in (318 mm)
C	9.24 in (235 mm)	G	5.25 in (133 mm)
D	4.97 in (126 mm)		

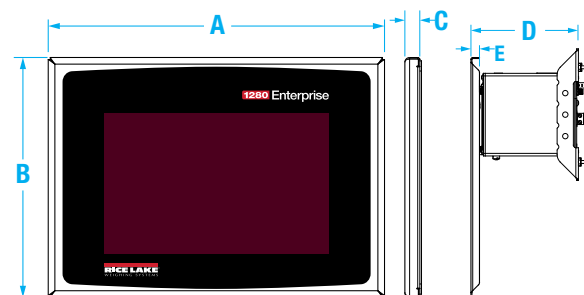
Wall Mount (1280-3)			
A	14.92 in (379 mm)	E	19.64 in (499 mm)
B	11.00 in (279 mm)	F	14.20 in (361 mm)
C	18.22 in (463 mm)	G	8.08 in (205 mm)
D	18.84 in (479 mm)		

Panel Mount (1280-4)			
A	9.00 in (229 mm)	D	5.34 in (136 mm)
B	9.00 in (229 mm)	E	0.32 in (8 mm)
C	0.58 in (15 mm)		

Touch-only Models:



1280-5



1280-6

Dimensions

7-inch Touch-only (1280-5)			
A	9.00 in (229 mm)	D	5.34 in (136 mm)
B	6.22 in (158 mm)	E	0.32 in (8 mm)
C	0.58 in (15 mm)		

12-inch Touch-only (1280-6)			
A	14.00 in (356 mm)	D	5.34 in (136 mm)
B	10.00 in (254 mm)	E	0.32 in (8 mm)
C	0.58 in (15 mm)		

INDICATORS /
CONTROLLERS

1280 Enterprise™ Series

Programmable Digital Weight Indicator

Part Number/Price

Part #	Description	Power	Display	Option Installed	Price
Universal Enclosure with 500 NIT Display (1280-2)					
171427 †	1280 Universal	115 VAC	500 NIT	Single Scale Card	\$3,850.00
171441 ††	1280 Universal	100 to 240 VAC	500 NIT	Single Scale Card	\$3,850.00
171662 †	1280 Universal	115 VAC	500 NIT	Dual Scale Card	\$4,050.00
172188 ††	1280 Universal	100 to 240 VAC	500 NIT	Dual Scale Card	\$4,150.00
Panel Mount Enclosure with 500 NIT Display (1280-4)					
171663	1280 Panel Mount	100 to 240 VAC	500 NIT	Single Scale Card	\$3,725.00
172186	1280 Panel Mount	100 to 240 VAC	500 NIT	Dual Scale Card	\$3,950.00
Wall Mount Enclosure with 500 NIT Display (1280-3)					
173673 †	1280 Wall Mount	115 VAC	500 NIT	Single Scale Card	\$4,250.00
174143 ††	1280 Wall Mount	100 to 240 VAC	500 NIT	Single Scale Card	\$4,250.00
174144 †	1280 Wall Mount	115 VAC	500 NIT	Dual Scale Card	\$4,550.00
174145 ††	1280 Wall Mount	100 to 240 VAC	500 NIT	Dual Scale Card	\$4,550.00
Wall Mount Enclosure with 1000 NIT Display (1280-3)					
172184 †	1280 Wall Mount	115 VAC	1,000 NIT	Single Scale Card	\$4,350.00
172185 ††	1280 Wall Mount	100 to 240 VAC	1,000 NIT	Single Scale Card	\$4,350.00
206563 †	1280 Wall Mount	115 VAC	1,000 NIT	Dual Scale Card	\$4,550.00
172187 ††	1280 Wall Mount	100 to 240 VAC	1,000 NIT	Dual Scale Card	\$4,650.00
Touch-only 7 inch with 500 NIT Display (1280-5)					
186618	1280 Touch-only 7 in	100 to 240 VAC	500 NIT	Single Scale Card	\$3,750.00
Touch-only 12 inch with 1500 NIT Display (1280-6)					
186465	1280 Touch-only 12 in	100 to 240 VAC	1,500 NIT	Single Scale Card	\$4,375.00



† US plug (NA) - Type B



†† Euro Plug - Type E



(Brazil) - Type N



††† BS1363 (UK) - Type G



††† AS 3112 (Australian) - Type I

Model Reference Chart

Choose any options to best fit your application and we customize

ENCLOSURE TYPE

- 1 Universal (1280-2)
- 2 Panel (1280-4)
- 3 Wall (1280-3)
- 4 Touch-only Panel 7 in (1280-5)
- 5 Touch-only Panel 12 in (1280-6)

POWER TYPE

- 1 AC
- 2 DC

DISPLAY TYPE

- 1 500 NIT
7 in Universal
- 2 1000 NIT
7 in Universal
- 3 500 NIT
7 in Panel/Wall
- 4 1000 NIT
7 in Panel/Wall
- 5 1500 NIT
12 in Panel

CORD TYPE

- 1 US Plug
Universal
- 2 Brazil Plug
Universal
- 3 Euro Plug
Universal
- 4 US Plug
Wall
- 5 Euro Plug
Wall
- 6 Brazil Plug
Wall
- 7 UK Plug
Universal
- 8 AU/NZ Plug
Universal
- 9 UK Plug
Wall
- 10 AU/NZ Plug
Wall

OPTION CARDS ALL SLOTS MUST BE FILLED

- A Blank
If no option, controller will need 6 blanks
- B Single A/D Scale
- C Dual A/D Scale
- D 24 Channel Digital I/O
- E Dual Serial Channel
- F 4-dry Contact Relay
- G Single Analog Out
- H Dual Analog Out
- I Analog Out
- J EtherNet/IP™
- K DeviceNet®
- L PROFINET
- M Modbus TCP
- N PROFIBUS® DP
- O EtherCat®
- P PowerLink

1280 Enterprise™ Series

Programmable Digital Weight Indicator

Single A/D Scale



Excitation Voltage:

10 VDC bipolar, 4 or 6 wire sensing
16 × 350 ohms per channel

Analog Input Signal:

- 10 to + 40 mV

Part #	Description	Price
220026	Single scale A/D	\$475.00
166957	A/D sealing kit	\$15.00

Dual A/D Scale



Excitation Voltage:

10 VDC bipolar, 4 or 6 wire sensing
8 × 350 ohms per channel

Analog Input Signal:

- 10 to + 40 mV

Part #	Description	Price
220027	Dual scale A/D	\$675.00
166957	A/D sealing kit	\$15.00

Digital I/O



24 channels, configurable as inputs or outputs
Inputs: 5 VDC max, active low; Outputs: 20 mA max per channel, active low; 5 VDC source available: 500 mA max

Part #	Description	Price
164684*	Digital I/O	\$350.00
170008	DIO adapter, includes 60 pin flat ribbon cable, 24 in	\$130.00
170009	DIO adapter, includes 60 pin round cable, 60 in	\$225.00
170736	DIO adapter, includes 60 pin cable and cord grip, 60 in	\$155.00

* 24 I/O ribbon cable required.

Dual Serial Channel



Two-channel, full duplex RS-232 with CTS/RTS, RS-485 or RS-422, 1200 to 115200 baud

Part #	Description	Price
164685	Dual serial channel	\$425.00

Single Analog Out



16 bit, voltage output 0 to 10 VDC, current output 0 to 20 mA, 4 to 20 mA

Part #	Description	Price
165366	Single analog out	\$375.00

Dual Analog Out



16 bit, voltage output 0 to 10 VDC, current output 0 to 20 mA, 4 to 20 mA

Part #	Description	Price
164686	Dual analog out	\$550.00

Relay Card



Relay four-dry contact, max current
3 A @ 30 VDC, 3 A @ 250 VAC

Part #	Description	Price
164689	Relay card	\$425.00

Analog Input



Analog Input Signal:

± 10 VDC, ± 100 mV, 0 to 20 mA

Part #	Description	Price
164687	Dual analog input	\$650.00

Data Exchange with PLC/DCS Systems

EtherNet/IP™



Part #	Description	Price
165792	EtherNet/IP, single port	\$620.00
208129	EtherNet/IP, dual port	\$805.00

DeviceNet®



Part #	Description	Price
165793	DeviceNet	\$620.00

PROFINET



Part #	Description	Price
165794	PROFINET	\$620.00

Modbus TCP



Part #	Description	Price
165796	Modbus TCP	\$620.00

PROFIBUS® DP



Part #	Description	Price
165795	PROFIBUS DP	\$620.00

EtherCAT®



Part #	Description	Price
179533	EtherCAT	\$620.00

INDICATORS /
CONTROLLERS

1280 Enterprise™ Series

Programmable Digital Weight Indicator

Options/Accessories

To have your option factory installed, please specify when placing your order.

Part #	Description	Price
Manuals and Software		
167659	Technical Manual	\$35.00
72809	Interchange database software	\$325.00
164939	8 GB Micro SD card with SD and USB adapter	\$25.00
195607	USB flash drive, 1 GB	\$9.00
Extended Display Cable Length for Touch Only Models		
182600	Display cable for 7 in (500 NIT) touch-only, 5 ft length	\$130.00
182601	Display cable for 7 in (500 NIT) touch-only, 10 ft length	\$160.00
187489	Display cable for 7 in (1,000 NIT) touch-only, 10 ft length	\$160.00
180027	Display cable for 12 in touch-only, 5 ft length	\$160.00
180028	Display cable for 12 in touch-only, 10 ft length	\$160.00
Extended Touch Cable Length for Touch Only Models		
180744	Touch cable for touch-only, 5 ft length	\$105.00
180745	Touch cable for touch-only, 10 ft length	\$105.00

Primary Component Parts

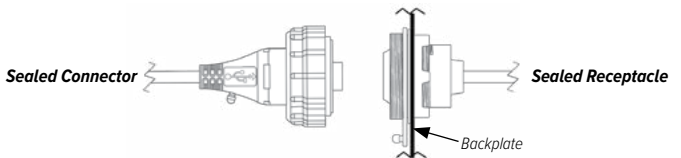
Part #	Description	Price
Displays		
163400	7 in 500 NIT display	\$350.00
163399	7 in 1,000 NIT display	\$450.00
182992	12 in 1,500 NIT display	\$995.00
Boards		
179992	1280 main CPU board with fan plate	\$1,100.00
199157	1280, CPU AC power, extruded aluminum enclosure (replacement)	\$1,500.00
Power Supplies		
202512	AC power supply board	\$180.00
202514	DC power supply board	\$180.00
Overlays		
164121	Keypad, for panel and wall mount	\$75.00
164120	Touchscreen, for panel and wall mount	\$130.00
161731	Keypad, for universal	\$75.00
161730	Touchscreen, for universal	\$145.00
178498	Touchscreen, for 7 in touch-only panel mount	\$295.00
176126	Touchscreen, for 12 in touch-only panel mount	\$400.00
178161	Clear protective overlay display for 7 in display (pack of 5)	\$63.00
178163	Clear protective overlay keypad for 7 in display (pack of 5)	\$63.00

Cables and Receptacles

To have your option factory installed, please specify when placing your order.

Part #	Connector Type		Length	Price
USB Cables <i>(Connector is a male plug)</i>				
79074	A UNSEALED	B UNSEALED	2 m	\$35.00
124700	A SEALED	B SEALED	3 m	\$125.00
126477	A SEALED	A UNSEALED	3 m	\$545.00
124701	A SEALED	B UNSEALED	3 m	\$745.00
124702	B SEALED	A UNSEALED	3 m	\$675.00
152434	A UNSEALED	Micro A UNSEALED	2 m	\$55.00
USB Receptacles <i>(Receptacle is a socket)</i>				
176790 Panel Mount	A SEALED	A UNSEALED	0.75 m	\$105.00
126476 Wall Mount	A SEALED	A UNSEALED	0.5 m	\$125.00
172735 Universal	A SEALED	A UNSEALED	0.25 m	\$90.00
Ethernet Cables				
72697	RJ-45 UNSEALED	RJ-45 UNSEALED	2 m	\$40.00
124706	RJ-45 SEALED	RJ-45 SEALED	3 m	\$625.00
124707	RJ-45 SEALED	RJ-45 UNSEALED	2 m	\$125.00
Ethernet Receptacles <i>(Receptacle is a socket)</i>				
176789	RJ-45 SEALED		0.75 m	\$145.00
172734	RJ-45 SEALED		0.5 m	\$90.00
126353	RJ-45 SEALED		0.25 m	\$125.00
Cable and Receptacle Accessories				
124694	Cover for sealed receptacles			\$25.00
124689	Cover for flash driver mounts on sealed receptacle			\$45.00

Unsealed Connectors





Part Number/Price

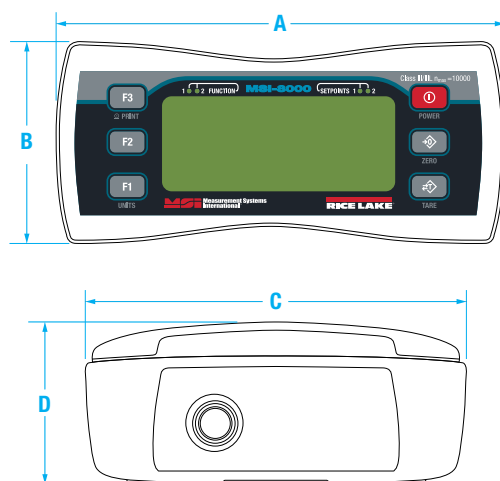
Part #	Description	Est. Weight	Price
139381	MSI-8000 RF remote display	5 lb	\$1,530.00

Options/Accessories

Part #	Description	Est. Weight	Price
149549	Universal 115/230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000 RF remote display	3 lb	\$180.00
149550	Universal 115/230 VAC 50/60 Hz (EC plug standard) battery charger for MSI 8000 RF remote display	1 lb	\$180.00
150964	DB9 female serial interface cable for MSI-8000 RF remote display	1 lb	\$220.00
151095	Audible alarm	—	\$330.00

Dimensions

MSI-8000			
A	8.00 in (203 mm)	C	3.85 in (98 mm)
B	3.85 in (98 mm)	D	1.37 in (35 mm)



Standard Features

- LCD display
- Membrane keypad for remote control functionality
- User-definable function keys for added versatility
- Universal 115/230 VAC, 50/60 Hz battery charger (NA plug standard)
- Compatible with all ScaleCore™ based products including: MSI-7300 Dyna-Link 2, MSI-3460 Challenger 3, MSI-4260 Port-A-Weigh, MSI-7000 and MSI-7001 TranSend™, MSI-9600HT and MSI-6360

(Contact MSI for application consultation)

Specifications

Power:

Integral lithium-ion battery
Universal 115/230 VAC, 50/60 Hz battery charger (NA plug included)

Operating Time:

Up to 24 hours of continuous use (15 minute auto-shutoff with non-use)

Annunciators:

COZ, stable, low battery, peak, net, kg, kN, lb, M, ton, setpoint, function LEDs

Weight:

0.98 lb (445 g)

Keys/Buttons:

On/Off, zero (100%), tare, print and two user-defined keys for the following functions: peak hold, high resolution, total, view total, net/gross, unit switching

Display:

Six-digit 1.0 in (26.4 mm) LCD screen

Temperature:

Operating:
-4 °F to 140 °F (-20 °C to 60 °C)

Rating/Material:

NEMA Type 4, IP65

RF Radio Link:

2.4 GHz 802.15.4
Communicates with RF 3460, 4260, 7300, 7000 & 7001

RF Effective Range:

Typically 100 to 300 ft, line of sight;
for longer range consult factory

Connector:

Four-pin Turck connector for charging and RS-232 communication

Warranty:

One-year limited

MSI-8000HD

Digital Weight Indicator/RF Remote Display



Approvals



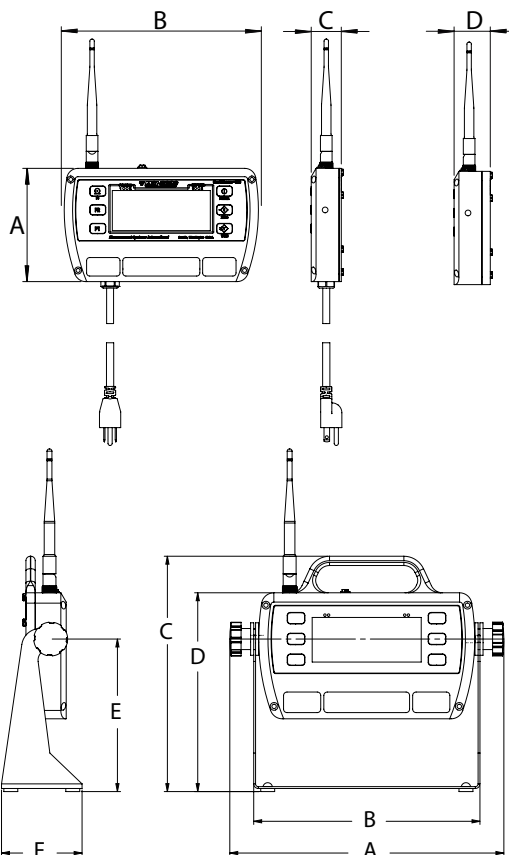
Standard Features

- Compatible with all ScaleCore™ based products
- LCD display
- Time and date
- Membrane keypad for remote-control functionality
- User-definable function keys for added versatility
- Swivel tilt stand

Dimensions

MSI-8000HD	
A	5.09 in (129 mm)
B	8.98 in (228 mm)
C	1.35 in (34 mm)
D	1.63 in (41 mm)

With Tilt Stand	
A	11.06 in (281 mm)
B	9.13 in (232 mm)
C	9.50 in (241 mm)
D	8.02 in (204 mm)
E	6.16 in (156 mm)
F	3.25 in (83 mm)



Options

(Contact MSI for application consultation)

- 18 to 72 VDC power
- Up to 8 configurable relay outputs
- Wi-Fi communications
- Wi-Fi indicators
- 802.15.4 Serial RF
- FHSS
- Wired Ethernet

Specifications

Power:

90 to 267 VAC, 9 to 36 VDC, 18 to 72 VDC,
120 to 300 VDC
Optional battery power module available

Excitation Voltage:

4.8 V current limited and over-voltage protected

RF Remote Channels:

Up to four remote sensors, monitored individually,
in pairs or sum all (non-A/D version only)

Service Counters:

A/D version only

A/D Inputs:

Two independent or summing load cell inputs

Filtering:

Off, Low, Hi-1, Hi-2

RF Radio Link:

2.4 GHz 802.15.4
Compatible with all ScaleCore™ based
products, including:
MSI-7300 Dyna-Link 2,
MSI-3460 Challenger 3,
MSI-4260 Port-A-Weigh, MSI-7000 and MSI-7001

RF Effective Range:

Typically 100 to 300 ft, line of sight;
for longer range consult factory

Communication Ports:

Dual RS-232 communication ports

Annunciators:

Stable, CO2, Peak, kg, kN, lb, M, Ton, Setpoint,
Function LEDs
Channels: 1, 2, 3, 4, TTL

Display:

Six-digit 1.0 in (26.4 mm) LCD

Units Displayed:

Pounds, kilograms, tons, metric tons, kilonewtons

Keys/Buttons:

On/Off, zero (100%), tare, print, and two user-
defined keys for the following functions: peak hold,
high resolution, total, view total, net/gross,
units switching

Rating/Material:

Enclosure: NEMA Type 4, IP66 milled anodized
aluminum with O-ring gaskets

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Warranty:

One-year limited

Approvals:

NTEP 15-110

Part Number/Price

Part #	Description	Est. Weight	Price
Indicator			
158427	Indicator, dual channel, 85 to 265 VAC	5 lb	\$2,025.00
158428	Indicator, dual channel, internal battery	5 lb	\$2,150.00
160478	Indicator, dual channel, 7 to 36 VDC	5 lb	\$1,825.00
159380	Indicator, dual channel, 9 to 36 VDC	5 lb	\$1,850.00
158425	Indicator, RF, dual channel, 85 to 265 VAC	5 lb	\$2,050.00
158426	Indicator, RF, dual channel, internal battery	5 lb	\$2,175.00
160477	Indicator, RF, dual channel, 7 to 36 VDC	5 lb	\$2,050.00
159378	Indicator, RF, dual channel, 9 to 36 VDC	5 lb	\$2,075.00
Remote Display			
153591	Remote display, RF, 85 to 265 VAC	5 lb	\$1,675.00
154853	Remote display, RF, internal battery	5 lb	\$1,825.00
160476	Remote display, RF, 7 to 36 VDC	5 lb	\$1,625.00
159376	Remote display, RF, 9 to 36 VDC	5 lb	\$1,650.00

Options/Accessories

Part #	Description	Price
155173	MSI-8000HD spare tilt stand option kit	\$94.00
155193	MSI-8000HD Ethernet TCP/IP option kit wired	\$475.00
162178	Antenna extension kit, 6 ft	\$535.00
148624	MSI-8000HD serial RS-232 cable	\$150.00
158779	MSI-8000HD two each coil relay option kit, 250 VAC/30 VDC 5 A or 100 VDC 0.4 A	\$410.00
158780	MSI-8000HD two each solid state relay option kit, 60 V pk 2.7 A	\$410.00
158781	MSI-8000HD two each solid state relay option kit, 200 V pk 0.9 A	\$420.00
149549	Universal 115/230 VAC 50/60 Hz (NA plug standard) battery charger for MSI-8000HD battery powered device	\$180.00
149550	Universal 115/230 VAC 50/60 Hz (international plugs) battery charger for MSI-8000HD battery powered device	\$180.00
171203	Audible alarm kit	\$390.00
176963	Serial print cable (for GoDex printer)	\$175.00
Relays		
172490	Expanded relay kit, four-channel, 12 A 5 V, latching relays	Consult
172492	Expanded relay kit, four-channel, 12 A 5 V, momentary relays	Consult
Consult	Expanded relay kit, four-channel, 0.9 A 200 V pk, AC/DC solid state relays	Consult
172495	Expanded relay kit, eight-channel, 12 A 5 V, momentary relays	Consult
172500	Expanded relays option kit, four-channel, 3 A, 60 V pk solid state Form C relays	Consult
172501	Expanded relays option kit, eight-channel, 3 A 60 V pk, solid state Form C relays	Consult
172502	Expanded relays option kit, eight-channel, 0.9 A 200 V pk, solid state Form C relays	Consult
171676	Expanded relays option kit, eight-channel, 12 A 5 V, latching relays	Consult

MSI-8004HD

Digital Weight Indicator/RF Remote Display



Approvals



Measurement
Canada
Approved

Standard Features

- Multicolor LED display
- Backlit membrane keypad for user functioning and controls
- Tilt bracket included
- Color changing display (via setpoints)

Options

(Contact MSI for application consultation)

- Expanded relay outputs
- Battery pack for mobile operation
- Second radio module for additional network connectivity
- Remote display 8 to 32 VDC
- Remote display 5 VDC
- Remote display 9 to 36 VDC
- Indicator 8 to 32 VDC
- Wired Ethernet
- Single and dual channel analog output
- Additional antenna kits
- Extended relay option kits

Part Number/Price

Part #	Description	Price
Indicator		
221177	AC Power (85 to 264 VAC), multi-color display, RF	\$2,075.00
221183	AC Power (85 to 264 VAC), multi-color display, RF, Instant power-on	\$2,050.00
221179	DC Power (9 to 36 VDC), multi-color display, RF	\$2,075.00
221181	DC Power (5 VDC), multi-color display, RF	\$2,225.00
Remote Display		
221176	AC Power (85 to 264 VAC), multi-color display, RF	\$2,075.00
221180	External battery (Li-ion 5V/3A), multi-color display, RF	\$2,025.00

Specifications

Power:

90 to 267 VAC, 9 to 36 VDC, 18 to 72 VDC,
120 to 300 VDC

Excitation Voltage:

4.8 V current limited and over-voltage protected

Functions:

Peak hold, high resolution, total, view total
net/gross, units switching

Units:

Pounds and kilograms

Channels:

1, 2, 3, 4, TTL

RF Remote Channels:

Up to 4 remote sensors, monitored individually,
in pairs or sum all (non-A/D version only)
(when used with TransSend™)

Service Counters:

A/D version only

A/D Inputs:

Two independent or summing load cell inputs

Relays:

Two 5 V coil, 250 VAC, 5 A relays

Filtering:

Off, Low, Hi-1, Hi-2

RF Radio Link:

2.4 GHz 802.15.4, optional second channel
for Serial RF, 802.11 Wi-Fi

RF Effective Range:

Typically 100 to 300 ft, line of sight; for longer
range consult factory

Communication Ports

Two RS-232 hard wired communication ports

Annunciators:

Stable, COZ, BT, RF, TTL, NET, kg, lb

Display:

Six-digit, 1.5 in (38 mm) LED display with red/green/
orange coloring

Keys/Buttons:

On/Off, Zero, Tare, Print and two user-defined keys

Temperature:

Certified: 23 °F to 104 °F (-5 °C to 40 °C)
Operating: -40 °F to 140 °F (-40 °C to 60 °C)

Rating/Material:

NEMA Type 4, IP66 milled anodized aluminum

Warranty:

One-year limited

Approvals:

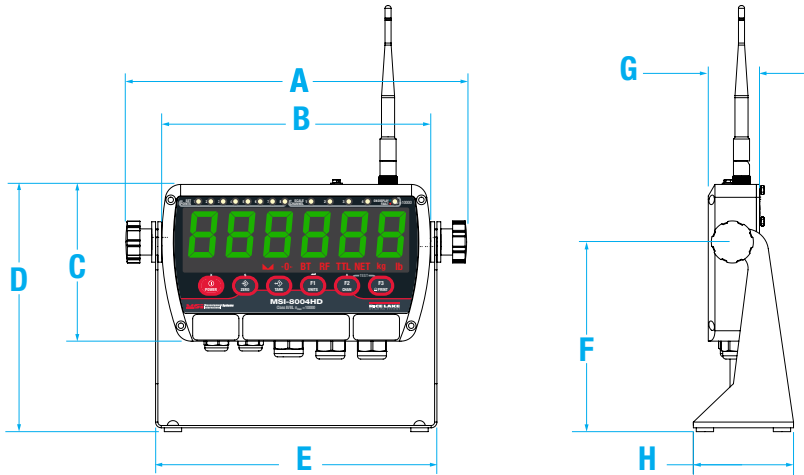
NTEP 17-036
Measurement Canada AM-6068

Options/Accessories

Part #	Description	Price
162178	Antenna extension kit, 6 ft	\$535.00
197013	Antenna extension kit, 20 ft	\$575.00
199105	Audible alarm not compatible with battery versions	Consult
22436	Cable assembly, DB9F to bare wires, 6 in, Gen 1	\$70.00
148624	Cable assembly, RS232 DB9, Gen 2	\$150.00
183437	Battery, 5V Li-ion battery with USB power ports. Output 5 V/3.0 A per port (6.0 A max) rate, 2 A per port (4 A if both ports are used).	\$245.00
187425	8004 option kit, Wi-Fi with TNC connector	\$210.00
187424	8004 option kit, 2nd Xbee® with TNC connector	\$220.00
223594	Option Kit, Dual Analog Output, 8004HD	\$625.00
224817	Ethernet (forward module only)	\$250.00

Dimensions

MSI-8004HD			
With Tilt Stand			
A	11.10 in (282 mm)	E	9.13 in (232 mm)
B	8.76 in (223 mm)	F	6.16 in (156 mm)
C	8.02 in (204 mm)	G	3.25 in (83 mm)
D	5.09 in (129 mm)	H	1.66 in (42 mm)



INDICATORS /
CONTROLLERS

MSI Scoreboards Wireless RF

Featuring LaserLight2™ Remote Displays



- Auto Learn mode of communication protocols
- Hold displayed weight (demand input)
- Software selectable standstill mode for no updates while in motion
- Durable weather-tight IP66 enclosure
- Adjustable day/night intensity
- Non-glare contrast filtered lens
- Mirror (reverse image) feature
- RS-232, 20 mA and RS-485 communications
- Auto sensing 115/230 VAC power supply
- PEMs for VESA flat-wall mount or side-mounting flange available
- Polyethylene breather vent inhibits internal moisture buildup
- Compatible with: MSI-7300 Dyna-Link 2, MSI-3460 Challenger 3, MSI-4260 Port-A-Weigh, MSI-7000 and MSI-7001 TranSend™, MSI-9600HT, MSI-6360, MSI-8000HD and MSI-8004HD

(Contact MSI for application consultation)

Specifications

Display:

Six-digit long-life LED, 4 in or 6 in

Power:

AC/DC power supply 85 to 265 VAC, 47 to 440 Hz/130 to 300 VDC

Rating/Material:

NEMA Type 4, IP66

Radio Link:

Direct sequence spread spectrum at 2.4 GHz

Radio Link Effective Range:

Typically, 100 to 300 ft, line of sight; for longer range consult factory

Temperature:

Operating:
-40 °F to 120 °F (-40 °C to 49 °C)

Standard Antenna:

1/2 wave 2 dBi, articulated

Warranty:

One-year limited

Echo Data Output:

RS-232

Standard Features

- Tilt mounting bracket
- Integrated data repeater
- Six high-intensity red digits (double-row discrete LED)

Part Number/Price

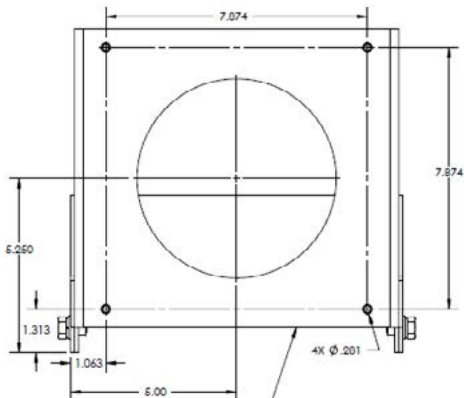
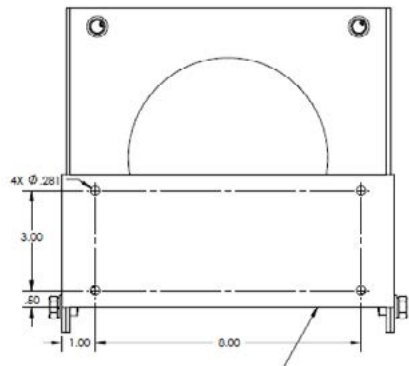
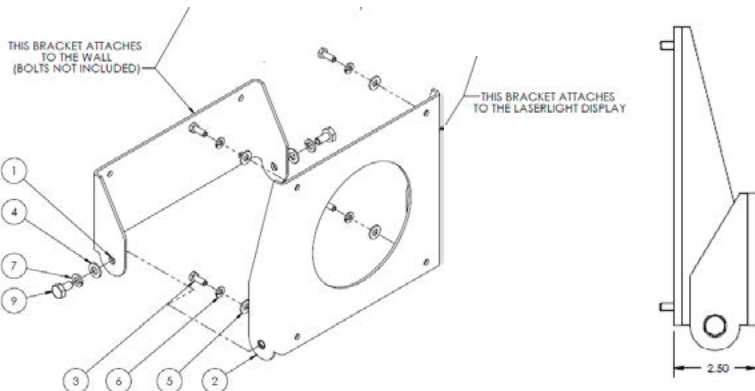
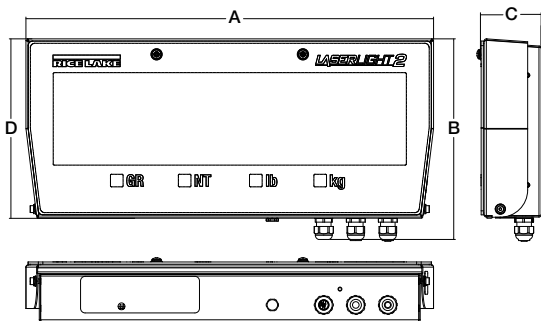
Part #	Description	Est. Weight	Price
178004	LaserLight2, 4 in with ScaleCore RF and tilt bracket	20 lb	\$3,350.00
178006	LaserLight2, 6 in with ScaleCore RF and tilt bracket	25 lb	\$3,850.00
178341	Laserlight2, 4 in with tilt bracket	20 lb	\$2,650.00
178342	Laserlight2, 6 in with tilt bracket	20 lb	\$3,025.00

Options/Accessories

Part #	Description	Price
162178	Antenna extension kit, 6 ft	\$535.00
197013	Antenna extension kit, 20 ft	\$575.00
178318	Replacement tilt bracket, LaserLight2	\$275.00

Dimensions

MSI Scoreboards Wireless RF							
22 in enclosure (4 in model)				31 in enclosure (6 in model)			
A	22.28 in (565 mm)	C	3.28 in (85 mm)	A	30.63 in (780 mm)	C	3.73 in (95 mm)
B	10.96 in (280 mm)	D	9.80 in (250 mm)	B	13.94 in (355 mm)	D	12.77 in (325 mm)





Part Number/Price

Part #	Description	Est. Weight	Price
MSI-7000			
227549	Four-channel, transmitter, 85-265 VAC, load cell, w/3 relays	2 lb	\$1,425.00
227550	Four-channel, receiver, 85-265 VAC, digital, w/3 relays	2 lb	\$1,275.00
MSI-7001			
230905	Single-channel, transmitter, 85-265 VAC, load cell input	2 lb	Consult
230951	Single-channel, receiver, 85-265 VAC, mV output	2 lb	Consult
230952	Single-channel, receiver, 85-265 VAC, RS232 output	2 lb	Consult

Options/Accessories

Part #	Description	Price
143531	Power cord, 6 V SLA battery charger EU	\$33.00
143533	Power cord, 6 V SLA battery charger, Australia	\$54.00
143534	Power cord, 6 V SLA battery charger, UK	\$49.00
162178	Antenna extension kit, 6 ft coax cable	\$535.00
150964	RS-232 13 ft (4 m) serial cable with nine-pin (female) connector, MSI-7001	\$220.00
150965	RS-232 13 ft (4 m) serial cable with nine-pin (male) connector, MSI-7001	\$180.00
145085	RS-232 serial cable, unterminated, MSI-7000	\$145.00
148624	Cable assembly, RS232/485 to DB9, used for setup and calibration	\$150.00
144400	Cable assembly, 4 pin, female, 4 meter, mV	\$110.00
145084	Cable assembly, 4 pin, female, 2 meter, mV	\$64.00
162177	Cable assembly, 4 pin, male, 2 meter, A2D cable, MSI-7001	\$145.00
162184	Connector, M12, 4 pin, straight, mV, MSI-7001	\$65.00
162185	Connector, M12, 4 pin, right-angle, mV, MSI-7001	\$65.00

Standard Features

- Works with any basic digital weight indicator
- Excitation to load cell(s) provided by the transmitter, not the indicator
- Each transmitter/receiver set is individually paired
- Serial communication cable included

Options

(Contact MSI for application consultation)

- Multiple antenna selections
- Analog output
- Additional VDC input power

Specifications

Power:

85 to 265 VAC

Excitation Voltage:

Transmitter: +4.8 VDC, 16 × 350 ohm or 32 × 700 ohm load cells

Standard Antenna:

1/2 wave 2dBi, articulated

Frequency:

Spread spectrum at 2.4 GHz, 802.15.4

Effective Range:

Typically 100 to 300 ft, line of sight; for longer range consult factory

Communication Ports:

Full duplex RS-232

Circuit Protection:

RFI, EMI, ESD protection

Temperature:

Operating:
-40 °F to 185 °F (-40 °C to 85 °C)

Rating/Material:

IP68, die-cast aluminum enclosure

Additional RF Options:

Wi-Fi
802.15.4
FHSS

Warranty:

One-year limited

MSI ScaleCore Webserver

Wireless Network Router



Approvals



Part Number/Price

Part #	Description	Price
207943	ScaleCore Webserver, 5 VDC and PoE	\$4,025.00
209704	ScaleCore Webserver, 7 to 14 VDC and PoE	\$4,025.00
210817	ScaleCore Webserver, 85 to 265 VAC and PoE wall cube	\$4,025.00

Options/Accessories

Part #	Description	Price
Consult	Extended-range antennas	Consult
213559	MSI-8000 handheld remote display with Wi-Fi, (only to be used with MSI ScaleCore Webserver systems and applications)	\$1,650.00
224240	Webserver Access Point, more than 8 devices	\$1,400.00

* Other MSI Wi-Fi products available based on application requirements.

Standard Features

- Display and control multiple ScaleCore based scales, indicators, remote displays and receivers through network connected devices using a web browser, including cell phones, tablets and PCs
- Capable of functioning either with an existing Wi-Fi network or as its own Wi-Fi router
- Can be powered by a dedicated power input or directly through the Ethernet cable where PoE (Power over Ethernet) is supported
- RS-232 communications at up to 460 Kbps
- Scale / load cell summing
- Tiered login to limit scale functionality for different levels of users

(Contact MSI for application consultation)

Specifications

Power:

5 to 6 VDC, 7 to 14 VDC, 85 to 265 VAC, PoE

Effective Range:

Typically 100 to 300 ft, line of sight; for longer range consult factory

Minimum System Requirements:

Will display on any device with a web browser supporting HTML 5
Connected ScaleCore based MSI scales and indicators are required to have the optional Wi-Fi radio modul

Connectivity:

Wi-Fi 2.4 GHz IEEE 802.11g
Gigabit Ethernet
2 x USB 2.0 Interface
RS-232 Serial

Status Annunciators:

Units (lb, kg, short tons (tn), metric tons (t), (NONE) gross/net, motion, center of zero

Enclosure:

IP65, aluminum black powder coated
(excludes 85 to 265 VAC model)

Temperature:

Operating:
14 °F to 104 °F (-10 °C to 40 °C)

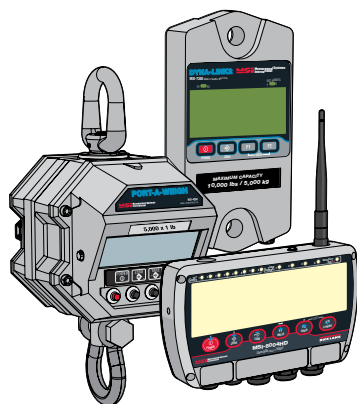
Warranty:

One year limited

Approvals:

NTEP 21-098 Classes III and IIIL at 10,000d

INDICATORS /
CONTROLLERS



MSI ScaleCore and Wi-Fi enabled device

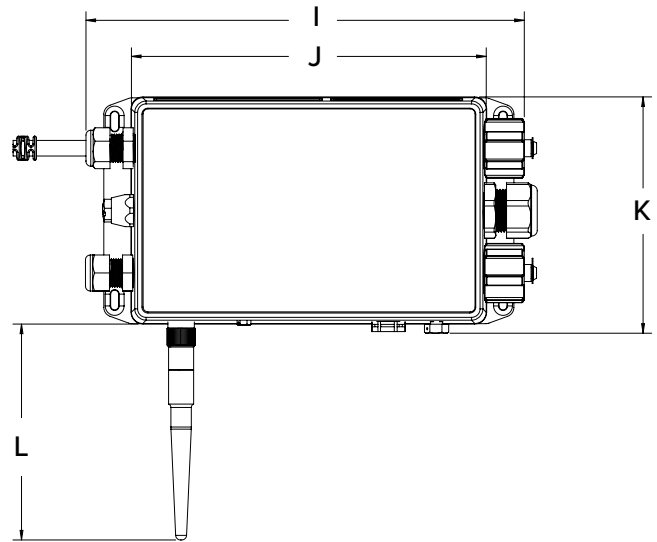
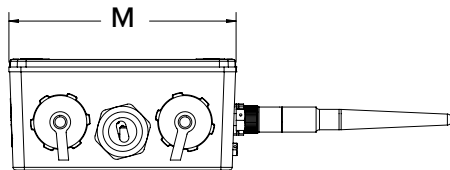
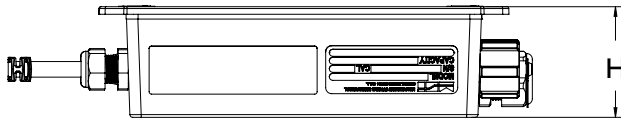
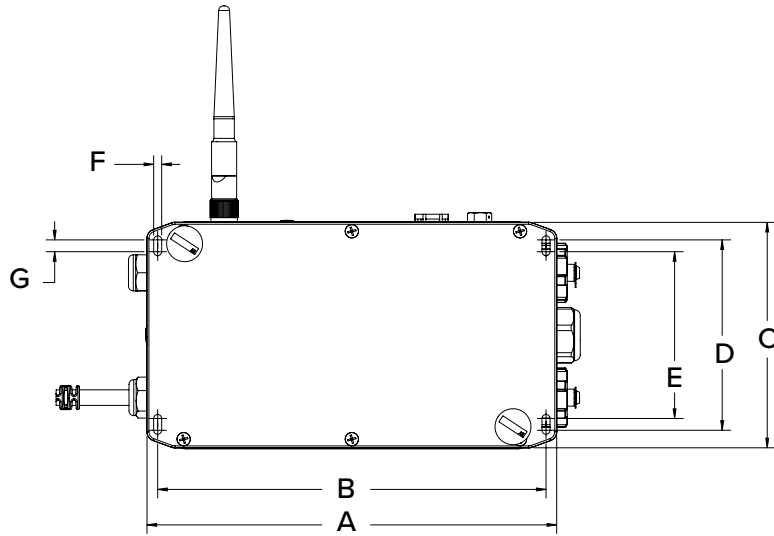


Display multiple ScaleCore devices using a web browser

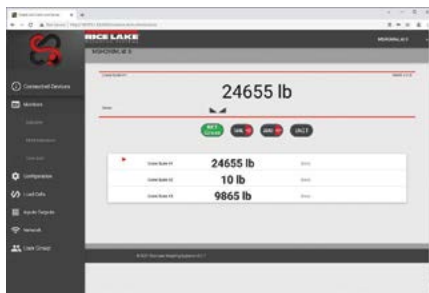
Dimensions

ScaleCore Webserver

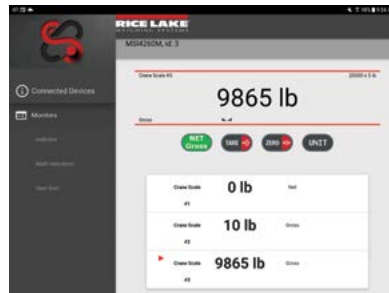
A	8.54 in (217 mm)	H	2.23 in (57 mm)
B	8.09 in (205 mm)	I	9.13 in (232 mm)
C	4.70 in (119 mm)	J	7.40 in (188 mm)
D	3.97 in (101 mm)	K	4.90 in (124 mm)
E	3.47 in (88 mm)	L	4.50 in (114 mm)
F	0.17 in (4 mm)	M	4.70 in (119 mm)
G	0.25 in (6 mm)		



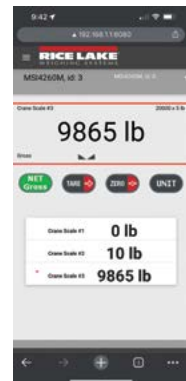
INDICATORS /
CONTROLLERS



Computer Screenshot



Tablet Screenshot



Phone Screenshot

Rugged Remote

Remote Control



Approvals



Part Number/Price

Part #	Description	Est. Weight	Price
173014	MSI Rugged Remote control, non-CE approved	3 lb	\$375.00
211841	MSI Rugged Remote control, CE approved	3 lb	\$375.00

Standard Features

- Handheld
- Compatible with: MSI-7300, Dyna-Link 2, MSI-7000 Series and all MSI Crane Scales
- Four button interface: Power, zero, tare, function

Specifications

Power:

Battery operated, three (3) AAA alkaline batteries

Function:

Power: turns unit on/off

Zero: zeros applied load up to 100% of capacity (limited range in NTEP/OIML configurations)

Tare: tares applied load and displays weight in net mode

User: programmable as test, units, net/gross, total, peak hold and setpoints

Radio Effective Range:

Typically 100 to 300 ft line of sight

Warranty:

One-year limited

Approval:

CE Listed



SCT1100-AN with Analog Output



SCT-1100-AN in Plastic Enclosure

Specifications

Power:

12/24 VDC

Power Consumption:

70 mA min to 100 mA max

Excitation Voltage:

5VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:

± 39 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum

A/D Sample Rate:

Four channel A/D 24-bit sigma-delta conversion, up to 200 conv./sec. auto select

Resolution:

Internal: 1,500,000 counts

Display: 800,000

Digital I/O:

Two inputs: 12/24 VDC

Two outputs: 150 mA 48 VAC/150 mA 60 VDC

Serial Ports:

Modbus RTU or ASCII selectable/bidirectional (both ports)

(1) RS-485 for connection to a PC or weight repeater

(1) RS-232 for connection to a PC or printer

Analog Output (if equipped):

Opto isolated, 16-bit

0 to 20mA, 4 to 20mA (Maximum 350 ohm)

0 to 5VDC, 0 to 10VDC (Minimum 10,000 ohm)

Annunciators:

Net, center of zero, stability

Display:

Six-digit (10 mm), red LED

Keys/Buttons:

Five key, membrane panel, tactile feel Zero (Down), Tare (Up), Mode (Right), Print (Enter), C (On/Off)

Dimensions:

(L × W × H)

4.17 × 3.54 × 2.28 in

(106 × 90 × 58 mm)

Temperature:

5 °F to 104 °F (-15 °C to 40 °C)

Humidity:

85% non-condensing

Rating/Material:

Enclosure: NEMA Type 4, plastic

Clear cover: six PG9 cord grips

Warranty:

One-year limited

Approvals:

NTEP 20-046

Measurement Canada AM-6165C

OIML R76/2006-A-GB1-19.17

UKCA Marked

cULus Listed

Approvals



Measurement
Canada
Approved



Standard Features

- Up to four independent scales or four load cell inputs
- Quick menu for real and theoretical calibration
- Red LED display
- DIN rail mountable
- Configurable calibration and setup parameters from keyboard
- Calibration using linearization points
- Reading of the net, gross and tare weights, clearing, semi-automatic and preset tare, scale switch, setting of outputs application thresholds
- Diagnostic information via serial port, message display, printing, setting of APW in counting mode, digital input for key press
- Modbus RTU or ASCII protocol
- Easy configuration with Rice Lake Tools software

Part Number/Price

Part #	Description	Est. Weight	Price
202101	Indicator, SCT-1100-AN four load cell input with Analog Output	1 lb	\$560.00
197011	Indicator, SCT-1100-AN four load cell input with Analog Output in plastic enclosure	1 lb	\$675.00

NOTE: PN 182588 is superseded by 202101

Options/Accessories

Part #	Description	Est. Weight	Price
188483	SCT-1000 converter RS-232/485 to Ethernet TCP/IP and Modbus TCP. Does not have an A/D	1 lb	\$400.00
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00



SCT-1000
Serial to Ethernet converter

SCT-2200

Signal Conditioning Transmitter



SCT2200 pictured with optional EtherNet/IP module

Approvals



Measurement
Canada
Approved



Standard Features

- HUB mode connects up to 16 transmitters to one fieldbus
- Two RS-485 port for "daisy-chain" network connection
- Quick menu for real and theoretical calibration
- Remote access through web browser for weight monitoring and calibration over EtherNet/IP™, PROFINET and Modbus TCP network
- Red LED display
- DIN rail mountable
- Calibration using linearization points
- Reading of the net, gross and tare weights, clearing, semi-automatic and preset tare setting of outputs application thresholds
- Diagnostic information via serial port, message display, printing, simulation of key pressure, Modbus RTU or ASCII protocol
- Printer management on second serial port available
- Multi-range function allows for subdividing the scale capacity in two, each up to 3,000 divisions
- Easy configuration with Rice Lake Tools software

Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
202103 *	Indicator, SCT-2200 for scale input to be used with fieldbus module	1 lb	\$375.00
202104 *	Indicator, SCT-2200-AN with analog output	1 lb	\$500.00
Fieldbus			
182592	Fieldbus, SCT-2200, PROFINET module	1 lb	\$625.00
194343	Fieldbus, SCT-2200, Ethernet TCP/IP and Wi-Fi	1 lb	\$620.00
182593	Fieldbus, SCT-2200, PROFIBUS® module	1 lb	\$425.00
182591	Fieldbus, SCT-2200, EtherNet/IP™ module	1 lb	\$625.00
182596	Fieldbus, SCT-2200, DeviceNet® module	1 lb	\$625.00
182598	Fieldbus, SCT-2200, EtherCAT module	1 lb	\$620.00
182597	Fieldbus, SCT-2200, CANopen module	1 lb	\$620.00
196694	Fieldbus, SCT-2200, Modbus TCP module	1 lb	\$620.00
182599	Cable with RJ45 plugs, 6 in length	1 lb	\$15.00
212772 **	Fieldbus, SCT-2200, PROFIBUS module	1 lb	\$425.00

NOTE: PN 182587 is superseded by 202103 and PN 182589 is superseded by 202104.

*How to Order the SCT-2200 for use with fieldbus module

Order 1 RJ45 cable for every Scale module connected to a Fieldbus module.

** Compatible with 682 indicator

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00

Specifications

Power:

12/24 VDC

Power Consumption:

70 mA min to 100 mA max

Excitation Voltage:

5 VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:

± 39 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum

A/D Sample Rate:

One channel A/D 24-bit sigma-delta conversion, up to 200 conv/sec. auto select

Resolution:

Internal: 1,500,000 counts

Display: 800,000

Digital I/O:

Two inputs: 12/24 VDC

Two outputs: 150 mA 48 VAC/150 mA 60 VDC

Communication Ports:

(1) RS-485, (1) RS-232

Analog output (if equipped):

Opt isolated, 16-bit

0-20 mA, 4-20 mA (Maximum 350 ohm)

0-5 VDC, 0-10 VDC (Minimum 10,000 ohm)

Annunciators:

Net, center of zero, stability

Display:

Six-digit 0.31 in (8 mm), red LED

Keys/Buttons:

Five key, tactile feel

Zero (Down), Tare (Up), Mode (Right), Print (Enter),

C (On/Off)

Dimensions:

(L × H × D)

4.72 × 4.52 × 0.98 in

(120 × 115 × 25 mm)

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)

Operating: 14 °F to 122 °F (-10 °C to 50 °C)

Humidity:

85% non-condensing

Rating/Material:

NEMA Type 1 plastic pluggable connectors

Weight:

1 lb (0.5 kg)

Warranty:

One-year limited

Approvals:

NTEP 20-046

Measurement Canada AM-6165C

OIML R76/2006-A-GB1-19.17

UKCA Marked

cULus Listed

SCT-3300

Signal Conditioning Transmitter



Approvals



Part Number/Price

Part #	Description	Est. Weight	Price
Transmitters			
188725	Indicator, SCT-3300 four load cell input with Analog Output	1 lb	\$400.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00

Standard Features

- Powers up to six (350 ohm) load cells in parallel
- Analog amplifier and transmitter
- Analog output: 0-20 mA, 4-20 mA, 0-10 V
- Mounting on Omega/DIN rail for back panel or junction box

Specifications

Power:

Input: 20 to 28 VDC

Power Consumption:

8 W

Excitation Voltage:

10 VDC, 170 mA, 6 × 350 ohm load cells

Analog Signal Input Range:

3.5 to 24 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum

1.0 µV/graduation recommended

A/D Sample Rate:

300 Hz

System linearity:

± 0.01% full scale

Analog Output (if equipped):

Opto isolated

0-20 mA, 4-20 mA (max 300 ohm)

0-10 VDC (min 10,000 ohm)

Dimensions:

(L × W × H)

4.56 × 3.72 × 2.4 in

(114 × 93 × 60 mm)

Temperature:

Operating: 14 °F to 122 °F (-10 °C to 50 °C)

Humidity:

85% non-condensing

Rating/Material:

DIN rail mount: NEMA Type 1

Weight:

0.5 lb (0.2 kg)

Warranty:

One-year limited

Approvals:

UKCA Marked

INDICATORS /
CONTROLLERS

SCT-1PX

Transmitter with Integrated Fieldbus and Web Server

NEW



INDICATORS /
CONTROLLERS

Standard Features

- Integrated web server allows complete diagnostics, calibration and remote configuration
- Real-time warning of any faults or disconnections of the load cell
- Configuration and calibration through Rice Lake Tools, XSpeed software or display navigation
- Power supply circuit with protections against overloads, polarity reversal and short circuits, specific for industrial environments
- Micro-USB communication and configuration port accessible from display for quick programming, diagnostics and data backup
- All scale data and adjustments are available through integrated fieldbus with up to 120 updates per second
- Removable terminal blocks to simplify wiring in the electrical panel
- Modbus RTU protocol integrated, up to 110 updates per second

Part Number/Price

Part #	Description	Est. Weight	Price
229189	SCT1PX-AN		\$500.00
229190	SCT1PX-PRONET		\$750.00
229191	SCT1PX-ETHIP		\$750.00
229192	SCT1PX-MODTCP		\$750.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00
Consult	Alibi Memory for type-approved communication to PC/PLC (fiscal memory, max 120,000 weighs) built-in real time clock to print the date/time with PCB, screw terminal, plastic box		Consult
Consult	Real time clock for printing/displaying of date and time		Consult

Specifications

Power:

12 to 24 VDC

Power Consumption:

5 W

Excitation Voltage:

5 VDC, 230 mA

up to 16 × 350 ohm load cells

Analog Signal Input Range:

±39 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum

A/D Sample Rate:

24-bit A/D

Single channel up to 4,800 Hz

Resolution:

Internal: 4,000,000 counts

Display: up to 800,000

Up to 8 linearization points

Digital I/O:

Two inputs: 12/24 VDC

Two outputs*: 500 mA, up to 48 VAC or 60 VDC

*(up to six with option for analog version only)

Serial Ports:

One micro-USB port (device) for PC configuration

One RS-485

EtherNet /IP™ or PROFINET IO or Modbus TCP

(Fieldbus version)

Analog Output (if equipped):

Opt. isolated, 16-bit

0 to 20 mA, 4 to 20 mA (maximum 350 ohm)

0 to 5 VDC, 0 to 10 VDC (minimum 10,000 ohm)

Annunciators:

Nine LEDs

Display:

Six-digit 0.56 in (14.2 mm), red LED

Keys/Buttons:

Five tactile keys

Zeroing, Tare, function mode, manual data printing/sending, On/Stand-by

Dimensions:

(L × W × H)

(100 × 53 × 136 mm)

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)

Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:

85% RH, non-condensing

Rating/Material:

Aluminum IP65

Warranty:

One-year limited

Approvals:

CE-M EN 45501

UL



Standard Features

- Load cell status diagnostics
- USB port for quick programming
- Integrated fieldbus and web server for configuration, diagnostics and data backup
- Process up to 4800 weight readings per second. The high speed allows an extremely accurate weight filtering even with weighing being performed in milliseconds.
- Up to 120 updates per second on Fieldbus
- New power supply circuit of the load cells (up to 16) for a better weighing stability
- Power supply circuit with protections against overloads, polarity reversal and short circuits, specific for industrial environments
- Micro-USB communication port for configuration, diagnostics and data backup is available on all versions
- Modbus RTU protocol integrated on all versions, up to 110 updates per second
- Real-time warning of any faults or disconnections of the load cell
- The integrated web server allows full diagnostics, calibration and remote configuration of the weight transmitter from an Ethernet network
- Calibration via theoretical (mV/V), with sample weights, web server or xSpeed software tool
- Easy configuration with Rice Lake Tools software

Optional xSpeed Software

- Customization of the weighing filter, to maximize the speed and accuracy in static and dynamic applications
- Graphical weighing analysis for the identification of mechanical disturbances and vibrations. Oscilloscope function for system diagnostics and filter optimization.

Part Number/Price

Part #	Description	Est. Weight	Price
216820	SCT-1SX-AN weight transmitter and analog output for DIN rail mount with digital I/O 2 IN and 4 OUT		\$895.00
229550	SCT-1SX-ETHIP weight transmitter and EtherNet/IP™ port for DIN rail mount with digital I/O 2 IN and 4 OUT, integrated web server		\$1,295.00
216821	SCT-1SX-PRONET weight transmitter and PROFINET port for DIN rail mount with digital I/O 2 IN and 4 OUT, integrated web server		\$1,095.00
216823	SCT-1SX-MODTCP weight transmitter and Modbus TCP port for DIN rail mount with digital I/O 2 IN and 4 OUT, integrated web server		\$1,295.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00
Consult	Alibi Memory for type-approved communication to PC/PLC (fiscal memory, max 120,000 weighs) built-in real time clock to print the date/time with PCB, screw terminal, plastic box		Consult
Consult	Real time clock for printing/displaying of date and time		Consult

Specifications

Power:

12 to 24 VDC, 5 W

Power Consumption:

70 mA min to 100 mA max

Excitation Voltage:

5V, 250 mA, 16 × 350 ohm load cells

Analog Signal Input Range:

±39 mV

Analog Signal Sensitivity:

High resolution 0.01 µV/d

Legal for trade 0.3 µV/e

A/D Sample Rate:

Up to 4800 Hz

Resolution:

Internal: 1,500,000 counts

Display: 800,000

Legal for Trade divisions

Up to 10,000e or multi-field 2 × 3,000e

Digital I/O:

Two inputs, configurable: 12 to 24 VDC

Four outputs, configurable: 150 mA 48 VAC/150 mA 60 VDC

Communication Ports:

One RS-485, one RS-232,

one micro-USB port (device)

Serial port update rate: up to 1600 Hz

Fieldbus update rate: up to 120 Hz

Analog Output (if equipped):

OPTO isolated, 16-bit

0 to 20 mA, 4 to 20 mA (maximum 350 ohm)

0 to 5 VDC, 0 to 10 VDC (minimum 10,000 ohm)

Annunciators:

Net, center of zero, stability

Display:

Six-digit (8 mm), red LED

Keys/Buttons:

Five key, membrane panel

Zero (down), Tare (up), Mode (right), Print (enter),

C (on/off)

Dimensions:

(L × W × H)

4.72 × 0.9 × 4.0 in

(120 × 23 × 112 mm)

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)

Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:

85% non-condensing

Rating/Material:

Enclosure: ABS plastic

Warranty:

One-year limited

Approvals:

CE-M EN 45501

2014/30/EU EMC

2014/35/EU LVD

2011/65/EU RoHS

OIML R61 - MID

OIML R76

SCT-4X

Integrated Fieldbus Transmitter



Standard Features

- Manage up to four load cells (one scale) or four scales with load cell feed circuit for greater weighing stability
- Process to 2,600 weight readings per second for single-channel
- Integrated web server allows complete diagnostics, calibration and remote configuration (not available on AN models)
- 14.2 mm display with new configuration menu to simplify calibration and configuration
- All data and adjustments of each scale are available through integrated fieldbus with up to 120 updates per second
- Frontal micro-USB communication port for configuration, diagnostics and data backup
- Removable terminal blocks to simplify wiring in the electrical panel
- RS-485 communication port always available on all versions
- Power supply circuit with protections, specific for industrial environment

Optional xSpeed Software

- Customization of the weighing filter, to maximize the speed and accuracy in static and dynamic applications
- Graphical weighing analysis for the identification of mechanical disturbances and vibrations
- Oscilloscope function for system diagnostics and filter optimization

Part Number/Price

Part #	Description	Est. Weight	Price
216824	SCT-4XAN high speed weight transmitter and analog output for DIN rail mount with digital I/O, 2 IN, 2 OUT, keypad, LED display (does not include web server)		\$940.00
216825	SCT-4X-ETHIP high speed 4 channel weight transmitter and EtherNet/IP™ port for DIN rail mount with digital I/O 2 IN, 2 OUT, 5-key keypad, LED display		\$1,175.00
216826	SCT-4X-MODTCP high speed 4 channel weight transmitter and Modbus TCP port for DIN rail mount with digital I/O 2 IN, 2 OUT, 5-key keypad, LED display		\$1,155.00
216827	SCT-4X-PRONET high speed 4 channel weight transmitter and PROFINET port for DIN rail mount with digital I/O 2 IN, 2 OUT, 5-key keypad, LED display		\$1,125.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00
Consult	Alibi Memory for type-approved communication to PC/PLC (fiscal memory, max 120,000 weighs) built-in real time clock to print the date/time with PCB, screw terminal, plastic box		Consult
Consult	Real time clock for printing/displaying of date and time		Consult

Dimensions

SCT-4X					
A	4.17 in (106 mm)	E	1.77 in (45 mm)	I	0.20 in (5 mm)
B	1.77 in (45 mm)	F	1.30 in (33 mm)	J	0.59 in (15 mm)
C	3.54 in (90 mm)	G	0.54 in (13.7 mm)	K	0.39 in (10 mm)
D	1.38 in (35 mm)	H	2.28 in (58 mm)		

Specifications

Power:

12 to 24 VDC

Power Consumption:

5 W

Excitation Voltage:

5 VDC, 230 mA
up to 16 × 350 ohm cells

Analog Signal Input Range:

± 39 mV

Analog Signal Sensitivity:

0.3 μ V/graduation minimum

A/D Sample Rate:

24-bit A/D
Single channel up to 2,600 conv/sec
4 channels up to 100 conv/sec

Resolution:

Internal: 3,000,000 counts
Display: up to 800,000
Up to 8 linearization points

Digital I/O:

Two inputs: 12/24 VDC
Two outputs: 150 mA 48 VAC/ 150 mA 60 VDC

Communication Ports:

1 Micro-USB port (device) for PC configuration
(1) RS-485, (1) RS-232

Analog Output (if equipped):

OPTO isolated, 16-bit
0 to 20 mA, 4 to 20 mA (maximum 350 ohm)
0 to 5 VDC, 0 to 10 VDC (minimum 10,000 ohm)

Annunciators:

Nine LEDs

Display:

Six-digit 0.31 in (8 mm), red LED

Keys/Buttons:

Five tactile keys
Zeroing, Tare, function mode, manual data printing/
sending, on/stand-by

Dimensions:

(L × W × H)
4.17 × 2.20 × 4.64 in
(106 × 56 × 118 mm)

Temperature:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:

80% RH, non-condensing

Rating/Material:

NEMA Type 1 plastic pluggable connectors
ABS

Weight:

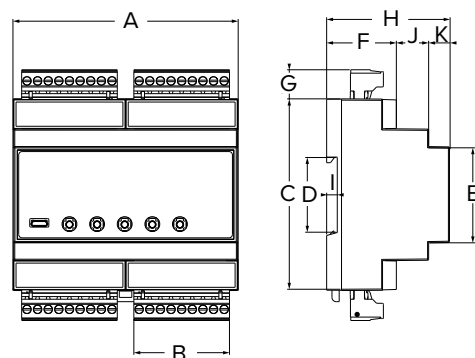
1 lb (0.5 kg)

Warranty:

One-year limited

Approvals:

CE-M EN 45501





SCT-10 in Plastic Enclosure

Approvals



Standard Features

- Converts digital weight to analog output
- Sums four input channels in parallel
- Theoretical calibration, real-weigh calibration, linearity calibration
- Push-button or preset tare
- Full-scale analog output with zero setting and PLC correction of analog signal
- Displays weight, configuration, calibration and error conditions
- DIN-rail mounting, suitable for back panel
- Two digital inputs, two digital outputs
- Supports ASCII or Modbus RTU protocols

Part Number/Price

Part #	Description	Est. Weight	Price
129393	SCT-10 converter with Analog Output	1 lb	\$585.00
129394	SCT-10 converter with Analog Output in enclosure	1 lb	\$760.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00
131129	Installation manual	1 lb	\$25.00
199687	DIN rail clip right & left end clamp		\$11.00

Specifications

Power:

Input: 12 to 24 VDC

Power Consumption:

5 W

Excitation Voltage:

5 VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:

± 19.5 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum

1.0 µV/graduation recommended

A/D Sample Rate:

80 Hz

Resolution:

Internal: 16,000,000 counts

Display: 999,999

System Linearity:

± 0.01% full scale

Digital I/O:

2 inputs 5-24 VDC, 2 outputs

24 VDC/60 mA

N.O. or N.C. (solid state)

Communication Ports

RS-485 or RS-232 simplex supports

up to 115,200 bps

Analog Output:

Opto isolated, 16 bit

0-20 mA, 4-20 mA (max 300 ohm)

0-10 VDC, 0-5 VDC, -10 to 10 VDC,

5 to 5 VDC, (min 10 k ohm)

Annunciators:

Net, center of zero, stability, kg, g, lb

Display:

0.3 in (8 mm), six-digit, seven-segment LED

Keys/Buttons:

4-key membrane panel, tactile feel

Zero, Tare, Print, Menu, Escape,

Left and Up Navigation, Enter

Dimensions:

(L × W × H)

DIN Rail Mount: 4.84 × 3.62 × 1.96 in

(123 × 92 × 50 mm)

Enclosure: 6.69 × 5.51 × 3.74 in

(170 × 140 × 95 mm)

Temperature & Humidity:

Operating Temperature:

-4 °F to 140 °F (-20 °C to 60 °C)

Humidity: 85% non-condensing

Rating/Material:

DIN rail mount: NEMA Type 1

Enclosure: NEMA Type 4/IP67, plastic

Clear cover: six PG9 cord grips

Weight:

1 lb (0.5 kg)

Warranty:

One-year limited

Approvals:

cULus Recognized

SCT-20

Signal Conditioning Transmitter



Approvals



Standard Features

- Space saving, vertical shape with DIN-rail mounting
- Displays weight, configuration, calibration and error conditions
- Theoretical calibration, real-weigh calibration, linearity calibration
- Push-button or preset tare
- Converts digital weight to analog output or optional DeviceNet® or PROFIBUS® or EtherNet/IP™ protocol
- Supports ASCII or Modbus RTU protocols
- Full-scale analog output with zero setting and PLC correction of analog signal
- Bit swapping selection for little endian and big-endian format
- Two digital inputs, three digital outputs
- One serial port, RS-232 transmit only, or RS-485 half-duplex connection

Part Number/Price

Part #	Description	Est. Weight	Price
129396	SCT-20 converter with Analog Output	1 lb	\$600.00
129397	SCT-20 converter with DeviceNet®	1 lb	\$725.00
129558	SCT-20 converter with PROFIBUS® DP	1 lb	\$785.00
129398	SCT-20 converter with EtherNet/IP™	1 lb	\$1,000.00
132534	SCT-20 converter with Ethernet TCP/IP	1 lb	\$1,055.00
156903	SCT-20 converter with Modbus TCP	1 lb	\$1,000.00
131128	Installation manual	1 lb	\$25.00

EtherNet/IP and Modbus output changed to Dual Port in 2019.

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply.	1 lb	\$160.00

Specifications

Power:

Input: 12 to 24 VDC

Power Consumption:

5 W

Excitation Voltage:

5 VDC, 120 mA, 8 × 350 ohm load cells

Analog Signal Input Range:

± 39 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum

1.0 µV/graduation recommended

A/D Sample Rate:

300 Hz

Resolution:

Internal: 16,000,000 counts

Display: 999,999

System linearity:

± 0.01% full scale

Digital I/O:

2 inputs 5 to 24 VDC, 3 outputs 115 VAC/150 mA

N.O. or N.C. (dry contact)

Communication Ports:

RS-232 transmit only, or RS-485 half duplex

Supports up to 115,200 bps

Analog Output:

Opto isolated, 16 bit

0-20 mA, 4-20 mA (max 300 ohm)

0-10 VDC, 0-5 VDC (min 10 k ohm)

Display:

0.3 in (8 mm), six-digit, seven-segment LED

Annunciators: Net, center of zero, stability,

kg, g, lb

Keys/Buttons:

4-key membrane panel, tactile feel

zero, tare, print, menu, escape, left and up

navigation, enter

Dimensions

(W × H × D)

4.72 × 4.52 × 0.98 in

(120 × 115 × 25 mm)

Temperature:

Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:

85% non-condensing

Rating/Material:

Enclosure: NEMA Type 1 plastic

pluggable connectors

Weight:

1 lb (0.5 kg)

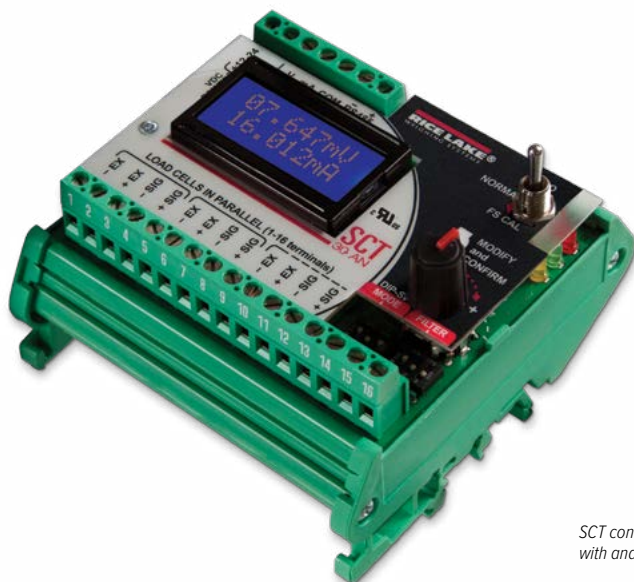
Warranty:

One-year limited

Approvals:

NTEP 14-083

cULus Recognized



SCT converter
with analog output

Approvals



Part Number/Price

Part #	Description	Est. Weight	Price
156794	SCT-30 converter with Analog Output	1 lb	\$475.00
156834	SCT-30 converter with Analog Output in enclosure	1 lb	\$630.00

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply	1 lb	\$160.00
131129	Installation manual	1 lb	\$25.00
199707	DIN rail clip right & left end clamp		\$11.00

Standard Features

- LCD display
- Powers up to eight (350 ohm) load cells in parallel (with a 24-bit A/D converter)
- A/D converter 24-bit 4.8 kHz
- 16-bit analog output: 0-20 mA, 4-20 mA, 0-5 V, 0-10 V, ± 5 V and ± 10 V
- Mounting on Omega/DIN rail for back panel or junction box
- Diagnostic message for load cell disconnect and over-capacity errors

Specifications

Power:

Input: 12 to 24 VDC

Power Consumption:

3 W

Excitation Voltage:

5 VDC, 120 mA, 8 \times 350 ohm load cells

Analog Signal Input Range:

± 39 mV

Analog Signal Sensitivity:

0.3 μ V/graduation minimum

1.0 μ V/graduation recommended

A/D Sample Rate:

300 Hz

Resolution:

Internal: 16,000,000 counts

System Linearity:

$\pm 0.01\%$ full scale

Communication Ports:

RS-485

Analog Output:

Opto isolated, 16 bit
0-20 mA, 4-20 mA (max 300 ohm)
0-10 VDC, 0-5 VDC (min 10 k ohm)

Display:

Eight-digit alphanumeric tow line LCD, 5 mm high

Keys/Buttons:

Control knob and DIP switches

Dimensions:

(L \times W \times H)
3.74 \times 3.54 \times 2.36 in
(95 \times 90 \times 60 mm)

Temperature:

Operating: -4°F to 140°F (-20°C to 60°C)

Humidity:

85% non-condensing

Rating/Material:

DIN rail mount: NEMA Type 1

Weight:

1 lb (0.5 kg)

Warranty:

One-year limited

Approval:

cULus Recognized

SCT-40

Signal Conditioning Transmitter



Approvals



Standard Features

- LCD display
- Supports up to eight independent reading channels for load cells
- Displays weight, configuration, calibration and error conditions
- DIN rail mounting
- Theoretical calibration, real-weight calibration and linear calibration
- Push-button or preset tare
- Converts digital weight to analog output or optional DeviceNet®, PROFIBUS®, EtherNet/IP™, PROFINET and Modbus TCP protocols
- Supports ASCII or Modbus RTU protocols
- Bit swapping selection for little endian and endian format
- Three digital inputs, five digital outputs
- One serial port, RS-485 half duplex or RS-232 transmit-only connection

SCT-40AN only

- Full scale analog output with zero setting and PLC correction of analog signal

Part Number/Price

Part #	Description	Est. Weight	Price
170470	SCT-40 with Analog Output	1 lb	\$800.00
170471	SCT-40 with DeviceNet®	1 lb	\$1,045.00
170472	SCT-40 with PROFIBUS®	1 lb	\$1,045.00
170473	SCT-40 with EtherNet/IP™	1 lb	\$1,085.00
170474	SCT-40 with Ethernet TCP/IP	1 lb	\$1,045.00
170475	SCT-40 with Modbus TCP	1 lb	\$1,085.00
170476	SCT-40 with PROFINET IO	1 lb	\$1,050.00

EtherNet/IP and Modbus output changed to Dual Port in 2019

Options/Accessories

Part #	Description	Est. Weight	Price
88792	12 VDC 1.2 A DIN rail mount power supply	1 lb	\$140.00
119244	24 VDC 1.3 A DIN rail mount power supply.	1 lb	\$160.00
131128	Installation manual	1 lb	\$25.00

Specifications

Power:

Input: 12 to 24 VDC

Power Consumption:

5 W

Excitation Voltage:

5 VDC, 240 mA, 16 x 350 ohm load cells

Analog Signal Input Range:

± 39 mV

Analog Signal Sensitivity:

0.3 µV/graduation minimum

1.0 µV/graduation recommended

A/D Sample Rate:

600 Hz

Resolution:

Internal: 16,000,000 counts

Display: 999,999

System linearity:

± 0.01% full scale

Digital I/O:

3 inputs 5 to 24 VDC, 5 outputs, 115 VAC/150 mA

Communication Ports

RS-232 transmit only, or RS-485 half duplex

Supports up to 115,200 bps

Analog Output (SCT-40AN only):

Opto isolated, 16 bit

0-20 mA, 4-20 mA (max 300 ohm)

0-10 VDC, 0-5 VDC (min 10 k ohm)

Display:

Backlit graphic LCD, transmissive

128 x 64 pixel resolution, 60 x 32 mm visible area

Keys/Buttons:

Five-key tactile keypad

Test, zero, tare, print menu, escape, left and up, navigator, enter

Dimensions:

(L x W x H)

5.82 x 3.62 x 2.36 in

(148 x 92 x 60 mm)

Temperature:

Operating: -4 °F to 140 °F (-20 °C to 60 °C)

Humidity:

85% non-condensing

Rating/Material:

DIN rail mount: NEMA Type 1

Weight:

1 lb (0.5 kg)

Warranty:

One-year limited

Approvals:

cULus Recognized



Standard Features

- High resolution design
- Used in high precision testing, troubleshooting and calibrating digital weight indicators
- Switchable offset
- Painted die-cast enclosure

Part Number/Price

Part #	Description	Price
157323	Ranger 7 high resolution calibration simulator	\$1,050.00

Options/Accessories

Part #	Description	Price
21116	Cable (4 ft) with banana plugs	\$70.00

Specifications

Vernier:

Two ranges; one is equal to the sum of the 0.05 mV/V switch and the 0 to 0.5 mV/V switch. The other is the sum of the 0.5 mV/V, 0.1 mV/V and 0.01 mV/V switches.

Load Impedance:

Three settings:
X0.5: 700 ohm
X1: 350 ohm (one standard load cell)
X4: 87.5 ohm (four load cell platform)

Linearity:

$\pm 0.01\% + 1\mu V$

Connectors:

Low Thermal Electronics, Type 2758 precision gold plated binding posts, standard banana jacks or 14 AWG wire

Temperature Coefficient:

5 ppm/°C

Zero Offset:

± 0.0005 mV/V

Output Range:

0 to 3 mV/V in 0.01 mV/V steps

LED Annunciators:

EXC +
EXC -
Offset ON
0.5 mV/V
0.1 mV/V

Warranty:

One-year limited

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MSI-3460B

Assembly (250 to 10,000 lb)

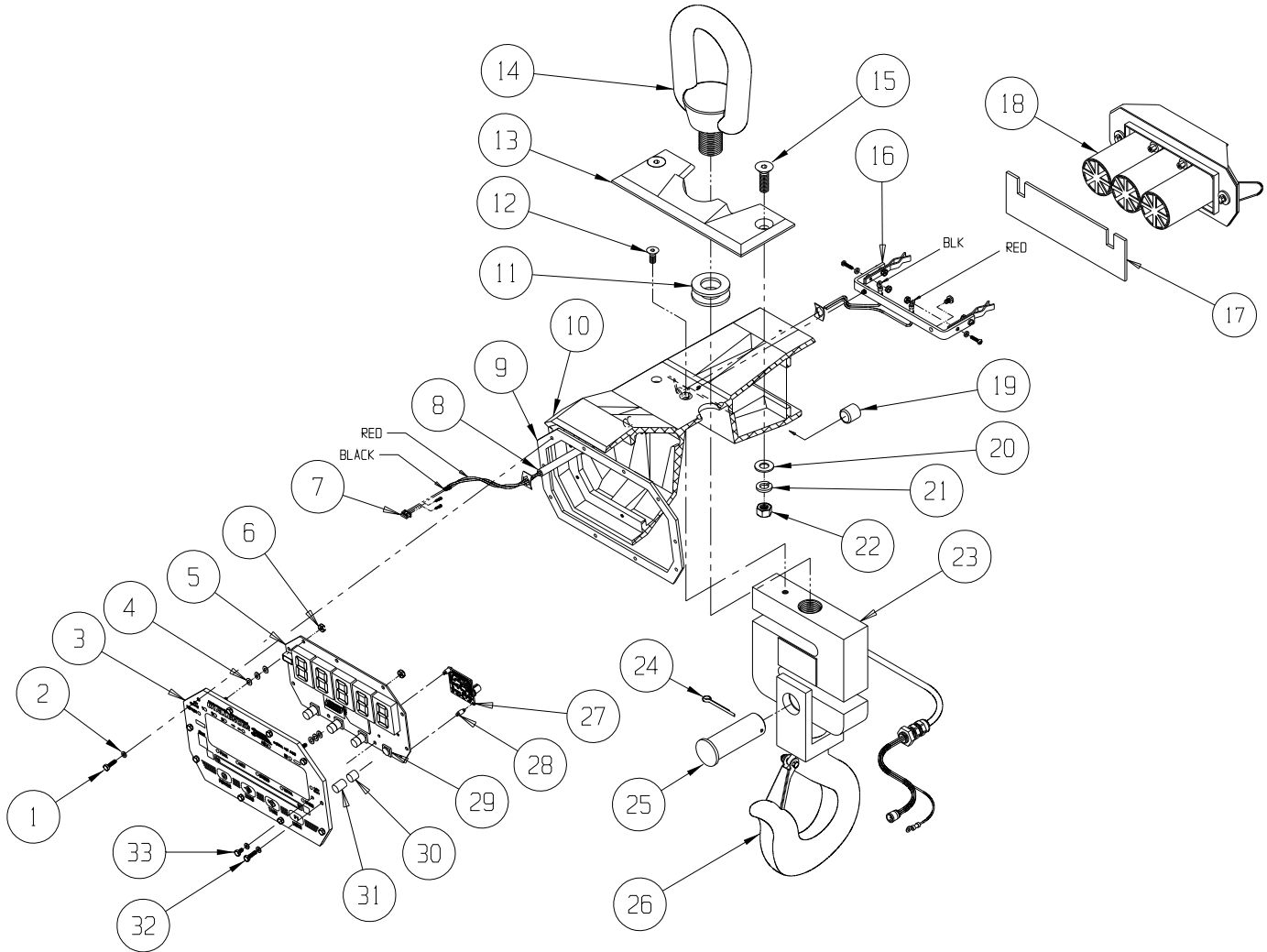


Part Number/Price

Item #	Part #	Description	Price
1	142276	Screw, hex head, 6-32 × 5/8, stainless steel	\$5.00
2	144645	Washer, rubber #6	\$4.00
3	149298	Front panel assembly	\$180.00
4	141899	Washer, flat, #6	\$4.00
5	149279	PCB display	\$315.00
6	146627	Nut, hex, 6-32, stainless steel	\$4.00
7	144528	Connector, power to PCB	\$4.00
8	148347	Tube, power cable	\$25.00
9	150056	Gasket, front panel	\$7.00
10	150398	Casting	\$510.00
11	148177	Washer, foam	\$4.00
12	146120	Screw, flat head, 1/4-20 × 5/8, stainless steel	\$4.00
13	148052	Plate, keeper, 250 to 2,000 lb	\$41.00
13	148050	Plate, keeper, 5,000 to 10,000 lb	\$41.00
14	142030	Eye, lifting, 250 to 2,000 lb	\$71.00
14	135441	Eye, lifting, 5,000 to 10,000 lb	\$155.00
15	146121	Screw, flat head, 3/8-16 × 1-1/4, allen, stainless steel	\$4.00
16	139821	Bracket assembly, battery clip	\$84.00
17	149750	Pad, battery	\$5.00
18	140049	Battery assembly	\$190.00
19	145927	Cap, receptacle	\$4.00
19a	145923	Receptacle	\$18.00
20	146533	Washer, flat, 3/8, stainless steel	\$4.00
21	15160	Washer, split lock, 3/8, stainless steel	\$1.10
22	126992	Nut, hex, 3/8-16, stainless steel	\$4.25
23	139081	Load cell assembly, 250/500 lb	\$1,150.00
23	139081	Load cell assembly, 1,000/2,000 lb	\$1,150.00
23	139082	Load cell assembly, 5,000/10,000 lb	\$1,025.00
24	145944	Pin, cotter, (fits 11205 clevis pin)	\$4.00
24	15258	Pin, cotter, (fits 11206 clevis pin)	\$3.30
25	142594	Pin, clevis (fits C00524-0009 hook)	\$5.00
25	142595	Pin, clevis (fits C00524-0010 hook)	\$20.00
26	140079	Hook/clevis assembly, 250 to 2,000 lb	\$360.00
	143232	Latch, safety (fits C00524-0009)	\$20.00
26	140080	Hook/clevis assembly, 5,000 to 10,000 lb	\$850.00
	143233	Latch, safety (fits C00524-0010)	\$45.00
27	153429	PCA, with Turck insert	\$310.00
28	144929	Spacer, dual locking	\$7.00
29	143816	Switch	Consult
30	144643	Cap, switch .364 in, orange	\$4.00
31	144644	Cap, switch .236 in	\$4.00
32	142573	Screw, hex head, 6-32 × 5/8, stainless steel , drilled	\$5.00
33	142574	Screw, hex head, 6-32 × 1/4, stainless steel	\$5.00

REPLACEMENT PARTS

MSI-3460B
Assembly (250 to 10,000 lb)



REPLACEMENT PARTS

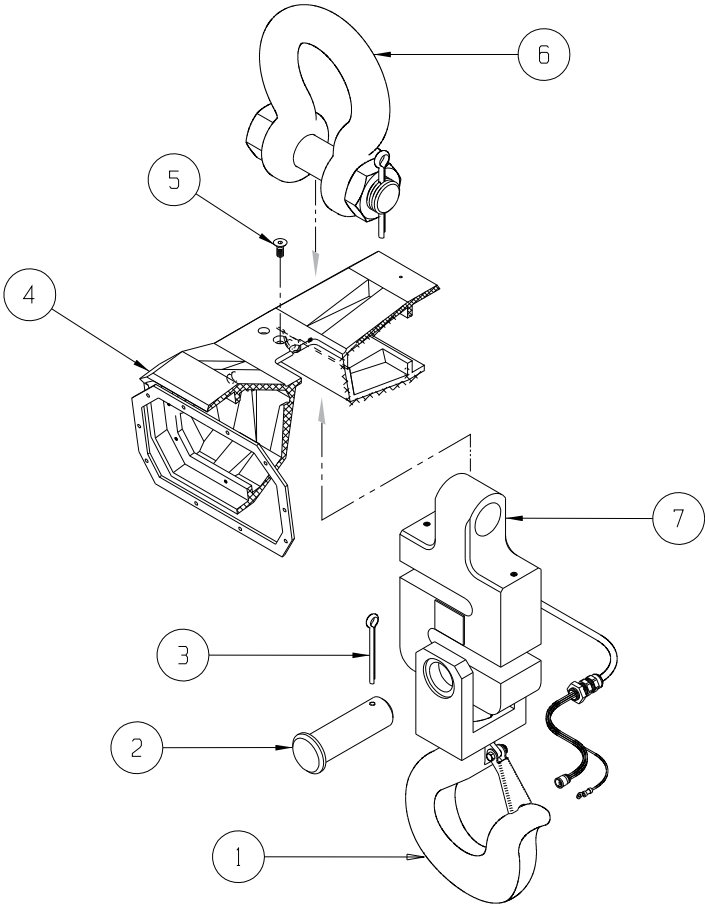
MSI-3460B

Assembly (15,000 lb)



Part Number/Price

Item #	Part #	Description	Price
1	135966	Swivel hook clevis assembly	\$1,740.00
-	143234	Latch, safety (fits 135966)	\$51.00
2	142836	Pin clevis, 1.25 diameter x 4, steel plated	\$71.00
3	142186	Pin, cotter, 3/16 x 2	\$4.00
4	136084	Casting	\$575.00
5	146120	Screw, 1/4-20 x 5/8, allen, stainless steel	\$4.00
6	146331	Shackle 12 ton	\$325.00
7	139083	Load cell assembly, 15,000 lb/7,000 kg	\$1,900.00

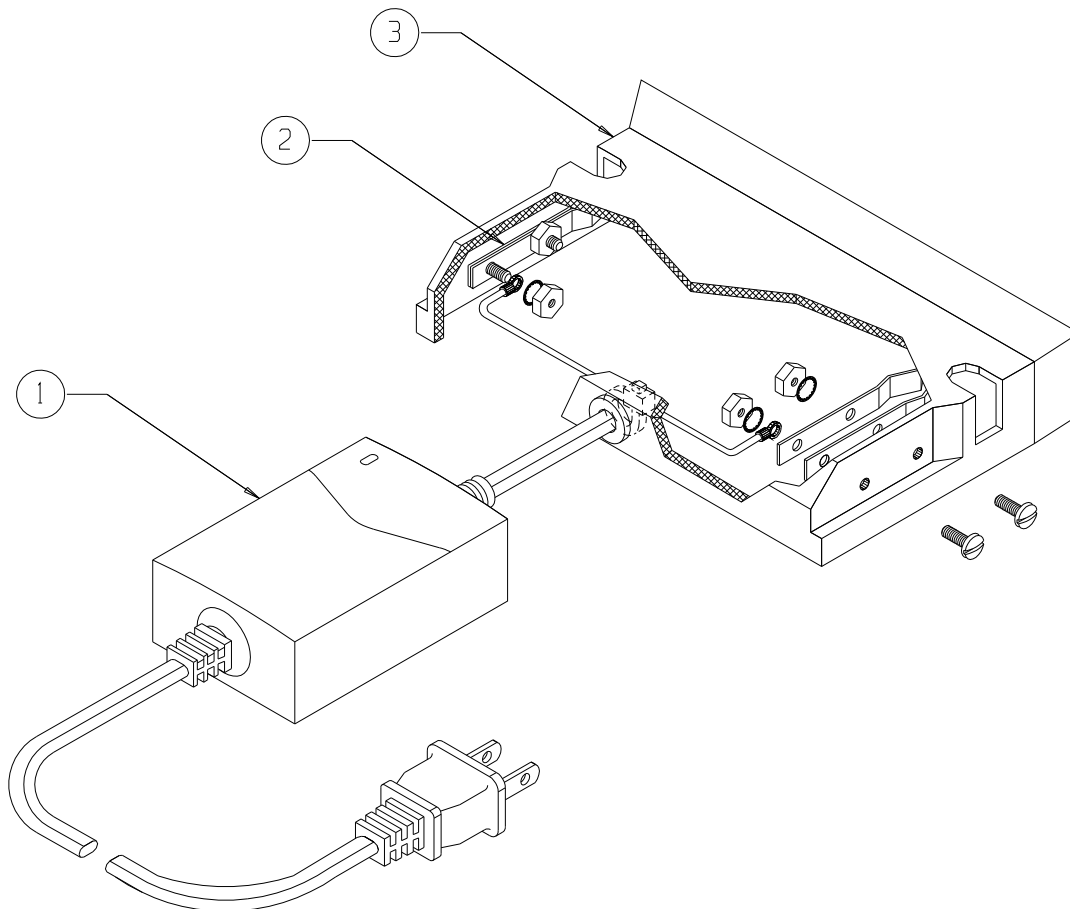


REPLACEMENT PARTS



Part Number/Price

Item #	Part #	Description	Price
1	162172	Charger, 6 V universal input	\$73.00
2	150038	Clip, battery terminal	\$8.00
3	150055	Enclosure	\$40.00
	139152	Battery charger assembly, US plug	\$220.00
	139153	Battery charger assembly, European plug	\$220.00
	139154	Battery charger assembly, no plug	\$220.00



MSI-3460C

Assembly (250 to 10,000 lb)

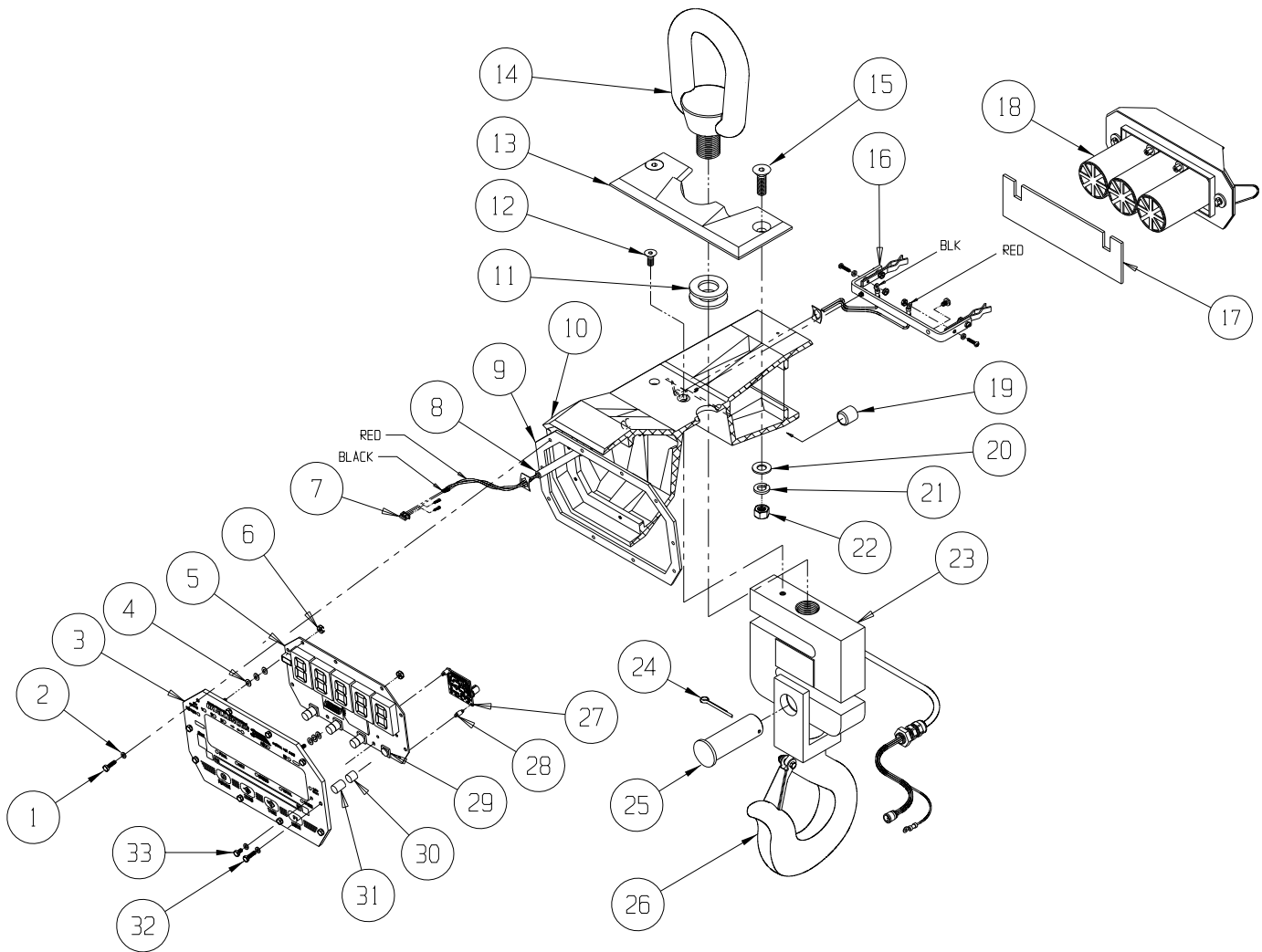


Part Number/Price

Item #	Part #	Description	Price
1	142276	Screw, hex head, 6-32 × 5/8, stainless steel	\$5.00
2	144645	Washer, rubber #6	\$4.00
3	206935	Front panel assembly	\$185.00
3	202494	Front panel assembly(EU)	\$250.00
4	141899	Washer, flat, #6	\$4.00
5	199170	PCB display	\$625.00
6	128445	Nut, hex, 6-32, stainless steel	\$4.00
7	144528	Connector, power to PCB	\$4.00
8	148347	Tube, power cable	\$25.00
9	150056	Gasket, front panel	\$7.00
10	150398	Casting	\$510.00
11	148177	Washer, foam	\$4.00
12	146120	Screw, flat head, 1/4-20 × 5/8, stainless steel	\$4.00
13	148052	Plate, keeper, 250 to 2,000 lb	\$41.00
13	148050	Plate, keeper, 5,000 to 10,000 lb	\$41.00
14	142030	Eye, lifting, 250 to 2,000 lb	\$71.00
14	135441	Eye, lifting, 5,000 to 10,000 lb	\$155.00
15	146121	Screw, flat head, 3/8-16 × 1-1/4, allen, stainless steel	\$4.00
16	139821	Bracket assembly, battery clip	\$84.00
17	149750	Pad, battery	\$5.00
18	140049	Battery assembly	\$190.00
19	145927	Cap, receptacle	\$4.00
19a	145923	Receptacle	\$18.00
20	146533	Washer, flat, 3/8, stainless steel	\$4.00
21	15160	Washer, split lock, 3/8, stainless steel	\$1.10
22	126992	Nut, hex, 3/8-16, stainless steel	\$4.25
23	139081	Load cell assembly, 250/500 lb	\$1,150.00
23	139081	Load cell assembly, 1,000/2,000 lb	\$1,150.00
23	139082	Load cell assembly, 5,000/10,000 lb	\$1,025.00
24	145944	Pin, cotter, (fits 11205 clevis pin)	\$4.00
24	15258	Pin, cotter, (fits 11206 clevis pin)	\$3.30
25	142594	Pin, clevis (fits C00524-0009 hook)	\$5.00
25	142595	Pin, clevis (fits C00524-0010 hook)	\$20.00
26	140079	Hook/clevis assembly, 250 to 2,000 lb	\$360.00
	143232	Latch, safety (fits C00524-0009)	\$20.00
26	140080	Hook/clevis assembly, 5,000 to 10,000 lb	\$850.00
	143233	Latch, safety (fits C00524-0010)	\$45.00
27	153429	PCA, with Turck insert	\$310.00
28	144929	Spacer, dual locking	\$7.00
29	143816	Switch	Consult
30	144643	Cap, switch .364 in, orange	\$4.00
31	144644	Cap, switch .236 in	\$4.00
32	142573	Screw, hex head, 6-32 × 5/8, stainless steel , drilled	\$5.00
33	142574	Screw, hex head, 6-32 × 1/4, stainless steel	\$5.00

REPLACEMENT PARTS

MSI-3460C
Assembly (250 to 10,000 lb)



REPLACEMENT PARTS

MSI-4260B

Front Casting Assembly



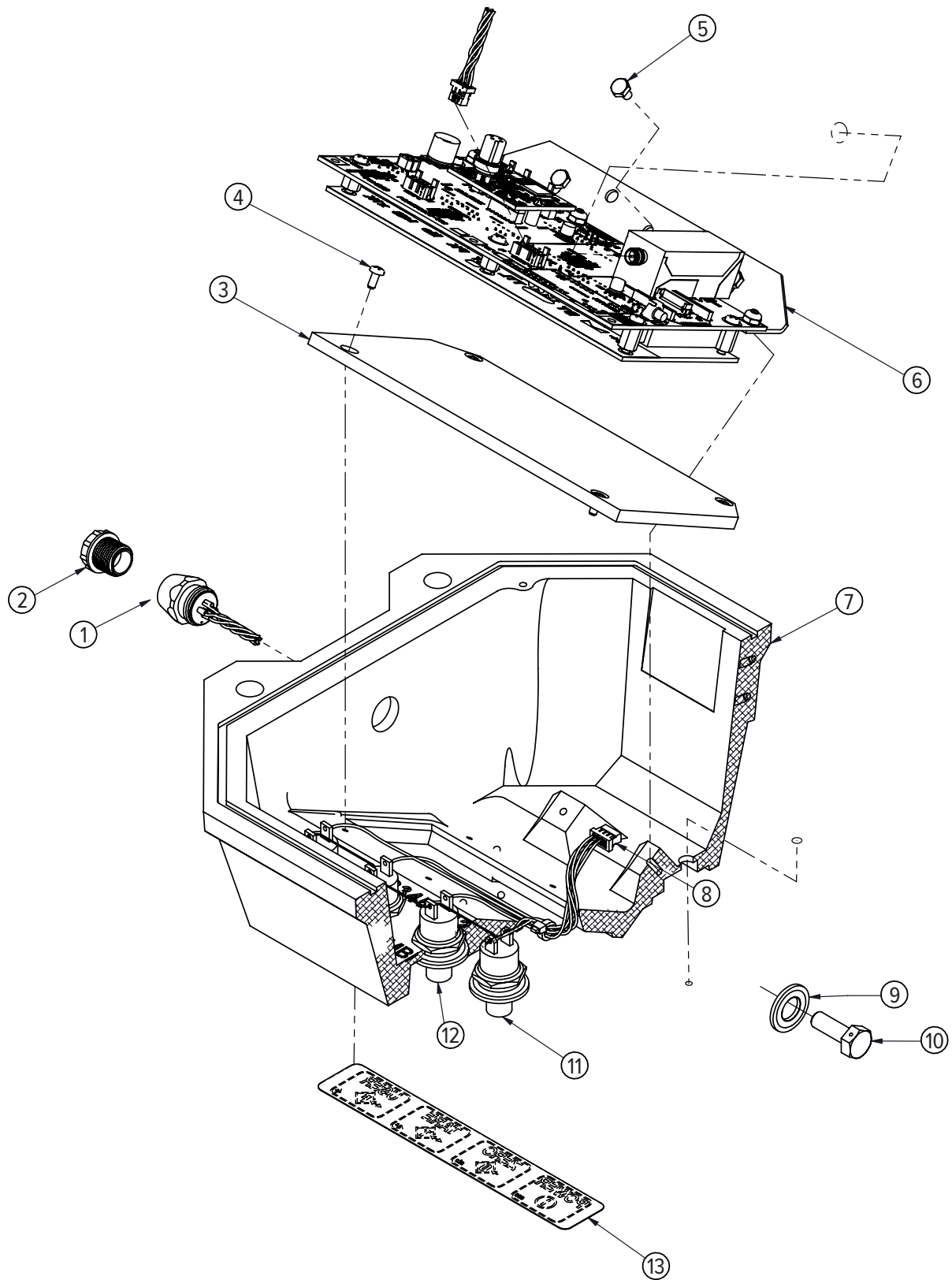
Part Number/Price

Item #	Part #	Description	Price
1	139449	Cable assembly comm serial data RS-232	\$56.00
2	143352	Conn closure cap IP68 male	\$4.00
3	149488	Window LED	\$59.00
4	128088	Screw 4-40 × 1/4 pan head Phillips drive 18-8 stainless steel	\$4.00
5	142197	Screw, pan head 6-32 × 5/16 long Phillips drive stainless steel with locking patch material applied	\$4.00
6	139427	Assembly electronics 5-digit	\$1,325.00
7	149481	Front casting and machining	\$425.00
8	139448	Cable assembly switch harness	\$96.00
9	142472	Washer seal Stat-O-Seal® 1/4 in	\$5.00
10	153203	Screw hex 1/4-20 × 0.375 UNC drilled head stainless steel	\$11.00
11	147562	Switch P3-31111W watertight red	\$48.00
12	147563	Switch P3-31112W watertight black	\$46.00
13	149506	Label switch	\$14.00
14	153429	PCA ScaleCore3 1-channel w/Turck insert	\$310.00
	149425	LED assembly	\$520.00

REPLACEMENT PARTS

MSI-4260B

Front Casting Assembly



REPLACEMENT PARTS

MSI-4260B

Mid-Section Assembly (S-beam Load Cell) (500 to 10,000 lb)



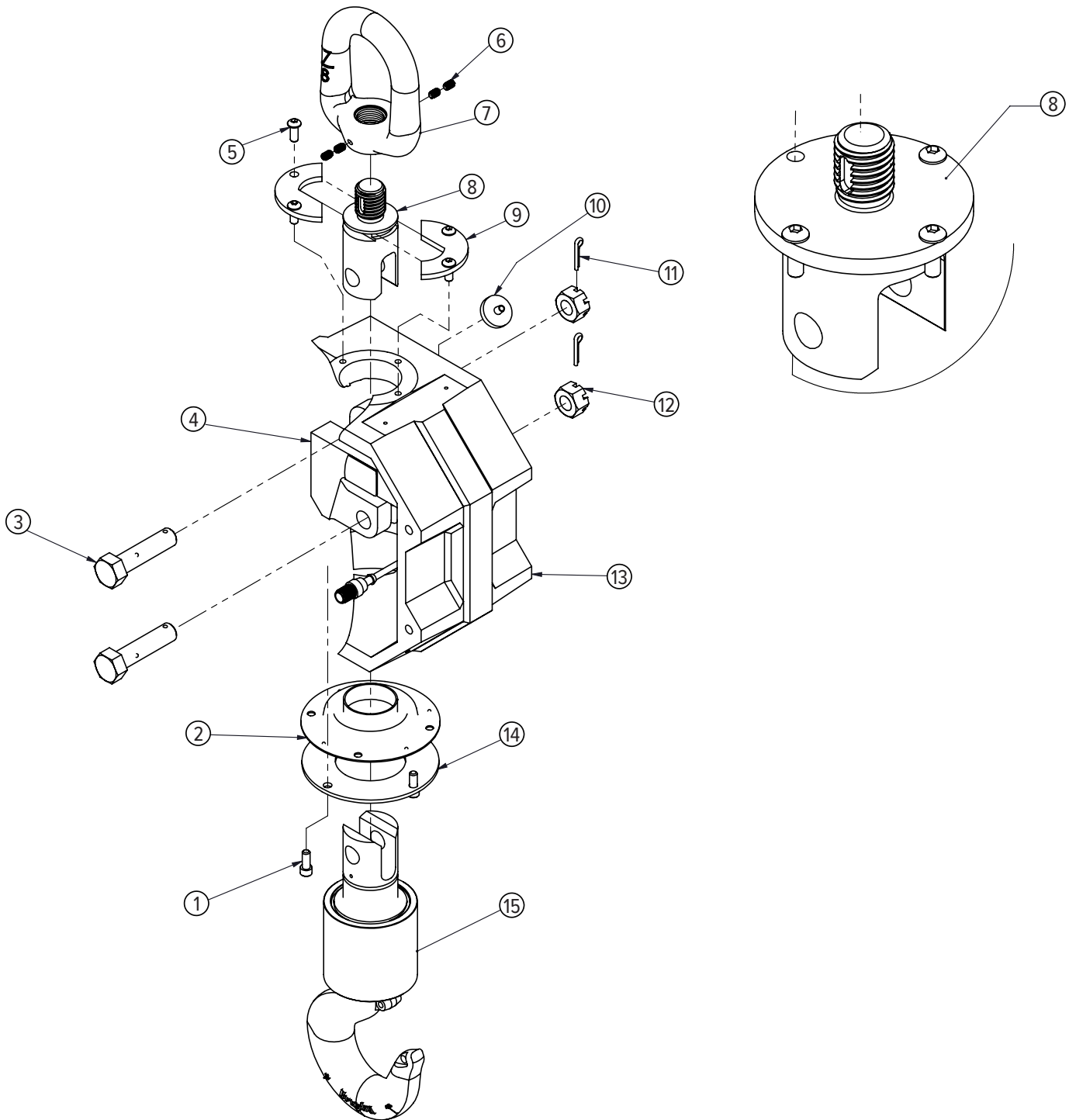
Part Number/Price

Item #	Part #	Description	Price
1	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00
2	149710	Seal link lower	\$49.00
	149165	Seal lower link	\$62.00
3	148457	Bolt clevis hex head 5/8 × 1.75 grip with thread protectors	\$26.00
3	149217	Bolt clevis hex head 5/8 × 2.75 grip with thread protectors	\$34.00
4	138661	Load cell assembly 500 lb S-beam	\$1,270.00
4	138662	Load cell assembly 1 K/2 K S-beam	\$1,270.00
4	138663	Load cell assembly 5 K S-beam	\$1,750.00
4	138664	Load cell assembly 10 K S-beam	\$1,780.00
5	72031	Screw, cap 1/4-20NC × 5/8 hex socket button head stainless steel	\$1.25
6	128799	Screw, set 1/4-20 × 3/8 socket head cup point 18-8 stainless steel	\$4.00
7	139795	Eye nut #7 500 lb - 2 K	\$220.00
	148225	Eye nut 5/10 K	\$280.00
8	148271	Upper link 500 lb/10 K	\$270.00
8	149126	Upper link S-beam 5/10 K	\$455.00
9	148274	Collar top half 500#/10 K	\$40.00
10	146347	Adhesive loctite 242-21 blue	\$5.00
11	15238	Pin, cotter 1/8 × 1 extended prong stainless steel	\$1.25
12	142832	Nut hex slotted 5/8 - 11	\$4.00
13	150519	Mid-section machined 500 lb to 10 K w/o o-ring	\$585.00
14	148259	Collar 500 lb/10 K	\$49.00
15	135043	Swivel hook assembly 500 lb/2 K	\$1,700.00
15	143236	Safety latches for 500 lb/2 K	\$28.00
15	134523	Swivel hook assembly 5/10 K S-beam	\$1,425.00
15	143233	Safety latches for 5/10 K	\$45.00

REPLACEMENT PARTS

MSI-4260B

Mid-Section Assembly (S-beam Load Cell) (500 to 10,000 lb)



REPLACEMENT PARTS

MSI-4260B

Mid-Section Assembly (20,000 to 30,000 lb)



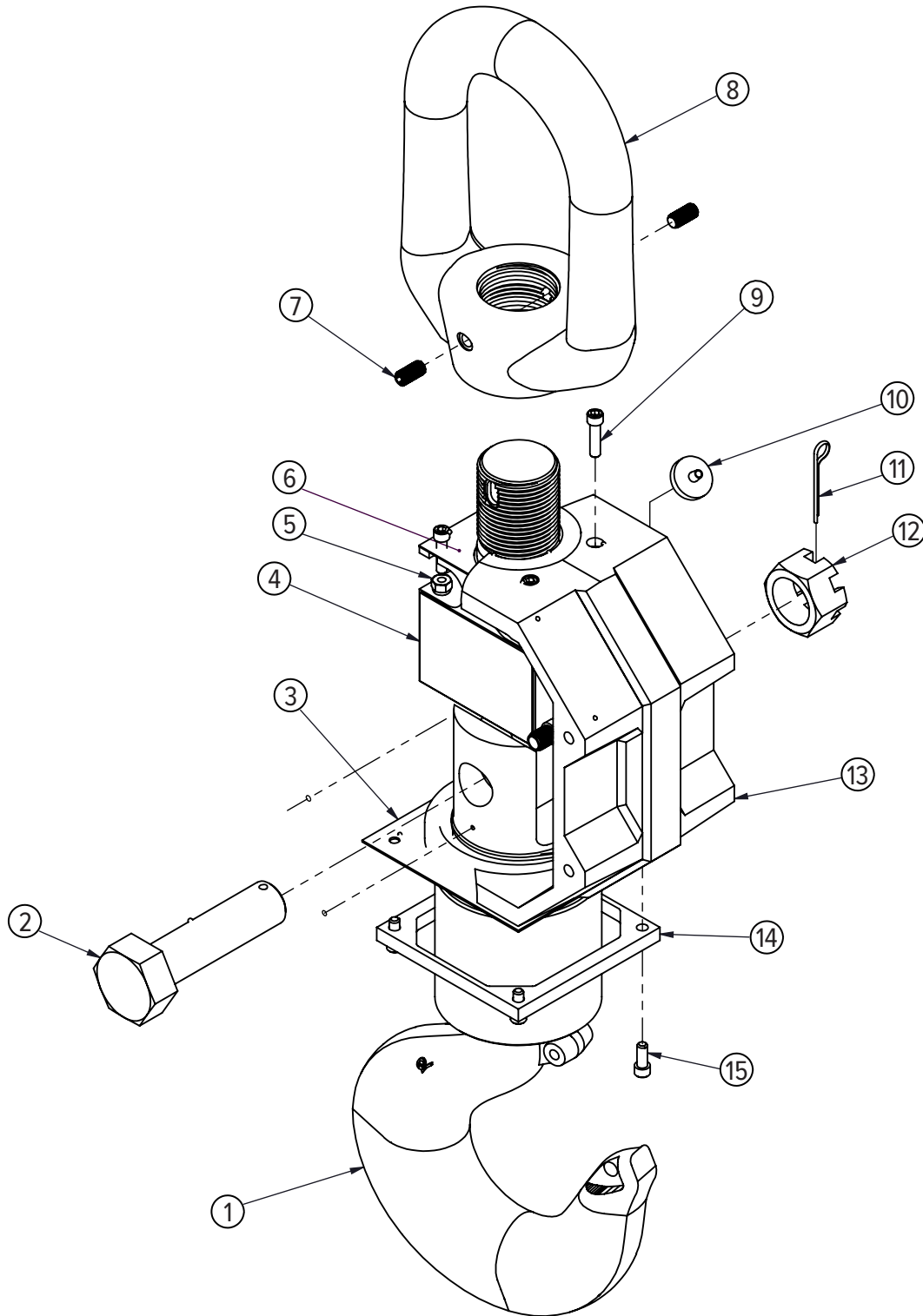
Part Number/Price

Item #	Part #	Description	Price
1	134938	Swivel hook assembly 20 K	\$2,790.00
1	110661	Safety latch 20 K	\$44.00
1	134939	Swivel hook assembly 30 K	\$3,620.00
1	143235	Safety latch 30 K	\$115.00
2	148458	Bolt clevis hex head 1.125-4 × 4.2 grip with thread protectors	\$86.00
3	149957	Boot lower 20 to 70 K	\$86.00
4	137763	Load cell assembly 20/30 K standard	\$2,240.00
5	146631	Nut hex 1/4-20 nyloc stainless steel	\$4.00
6	149976	Gasket upper 20/30 K Port-A-Weigh gasket	\$6.00
7	146081	Screw set 3/8-24 × 3/4 cup point stainless steel	\$3.00
8	148110	Eye nut 20/30K galvanized	\$635.00
9	81405	Screw, socket head 1/4-20 UNCx1 18-8 stainless steel	\$1.25
10	146322	Filter millipore	\$10.00
11	142186	Cotter pin 3/16 × 2 stainless steel	\$4.00
12	142833	Nut hex slotted 1.125 - 7 zinc plated	\$12.00
13	150523	Mid-section machined 20/30 K	\$510.00
14	149958	Collar bottom 20 to 50 K	\$140.00
15	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00

REPLACEMENT PARTS

MSI-4260B

Mid-Section Assembly (20,000 to 30,000 lb)



REPLACEMENT PARTS

MSI-4260B

Mid-Section Assembly (50,000 to 70,000 lb)



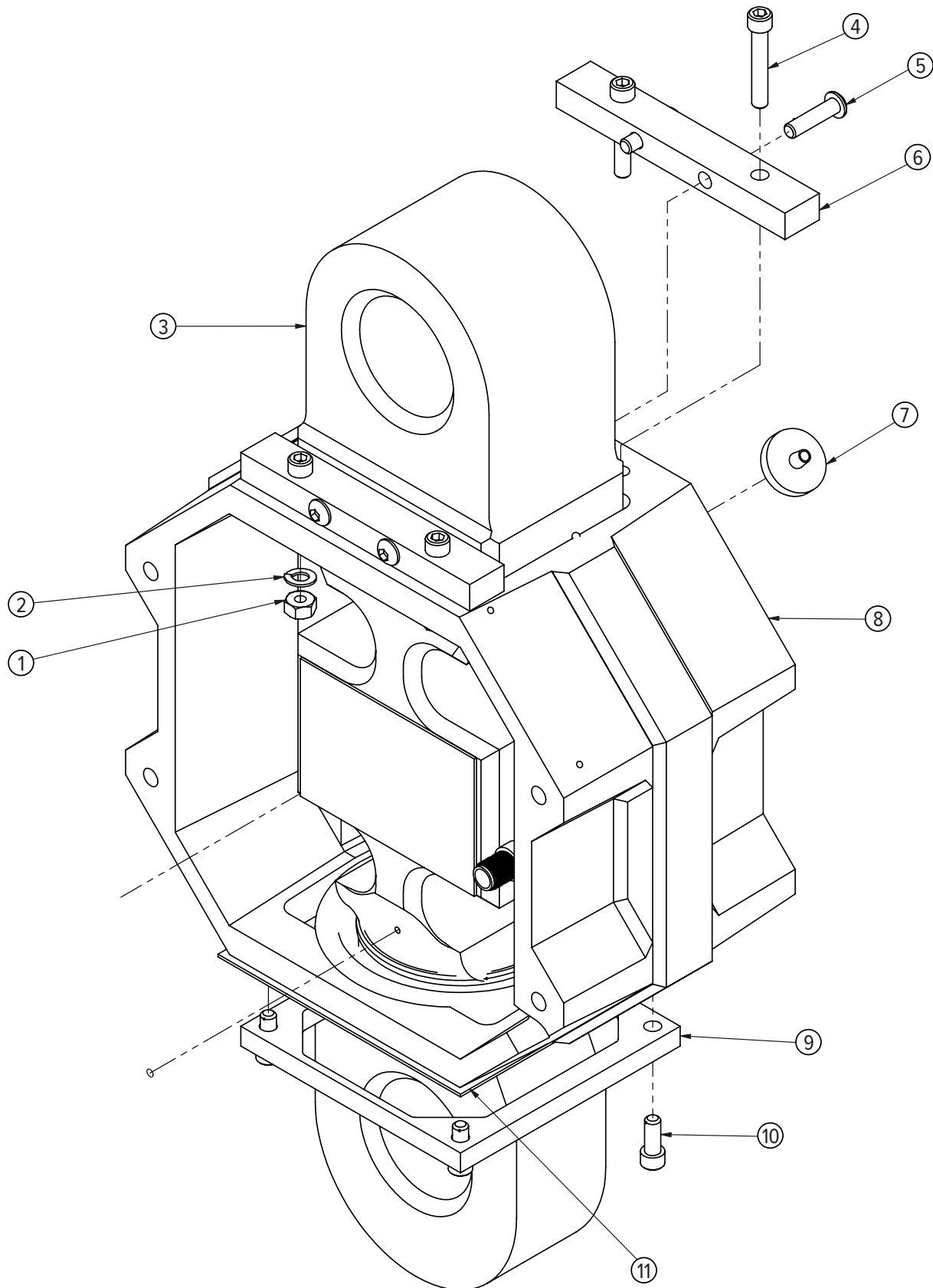
Part Number/Price

Item #	Part #	Description	Price
1	14642	Nut, 1/4-20NC hex stainless steel	\$4.00
2	15148	Washer, lock 1/4 regular	\$1.25
3	137764	Load cell assembly 50/70 K standard	\$5,330.00
4	117599	Screw, cap 1/4-20NC x 1-1/2 hex socket head 18-8 stainless steel	\$4.00
5	145982	Screw button head 1/4-20 x 1 stainless steel socket head	\$4.00
6	148213	Collar top 50/100 K	\$97.00
7	146322	Filter millipore	\$10.00
8	150525	Mid-section machined 50/100 K	\$515.00
9	149958	Collar bottom 20 to 50 K	\$140.00
10	145990	Screw socket head 1/4-20 x 5/8 stainless steel	\$4.00
11	149957	Boot lower 20 to 70 K	\$86.00
Additional Parts Available			
	151356	Shackle, 25 T, 50,000 lb	Consult
	146335	Shackle, 40 T, 70,000 lb	Consult
	135035	Hook, swivel, 50,000 lb	\$8,390.00
	142179	Latch, safety (fits 135035 hook)	\$170.00
	135036	Hook, swivel, 70,000 lb	\$11,750.00
	142180	Latch, safety (fits 135036 hook)	\$220.00

REPLACEMENT PARTS

MSI-4260B

Mid-Section Assembly (50,000 to 70,000 lb)



REPLACEMENT PARTS

MSI-4260B

Battery Casting Assembly



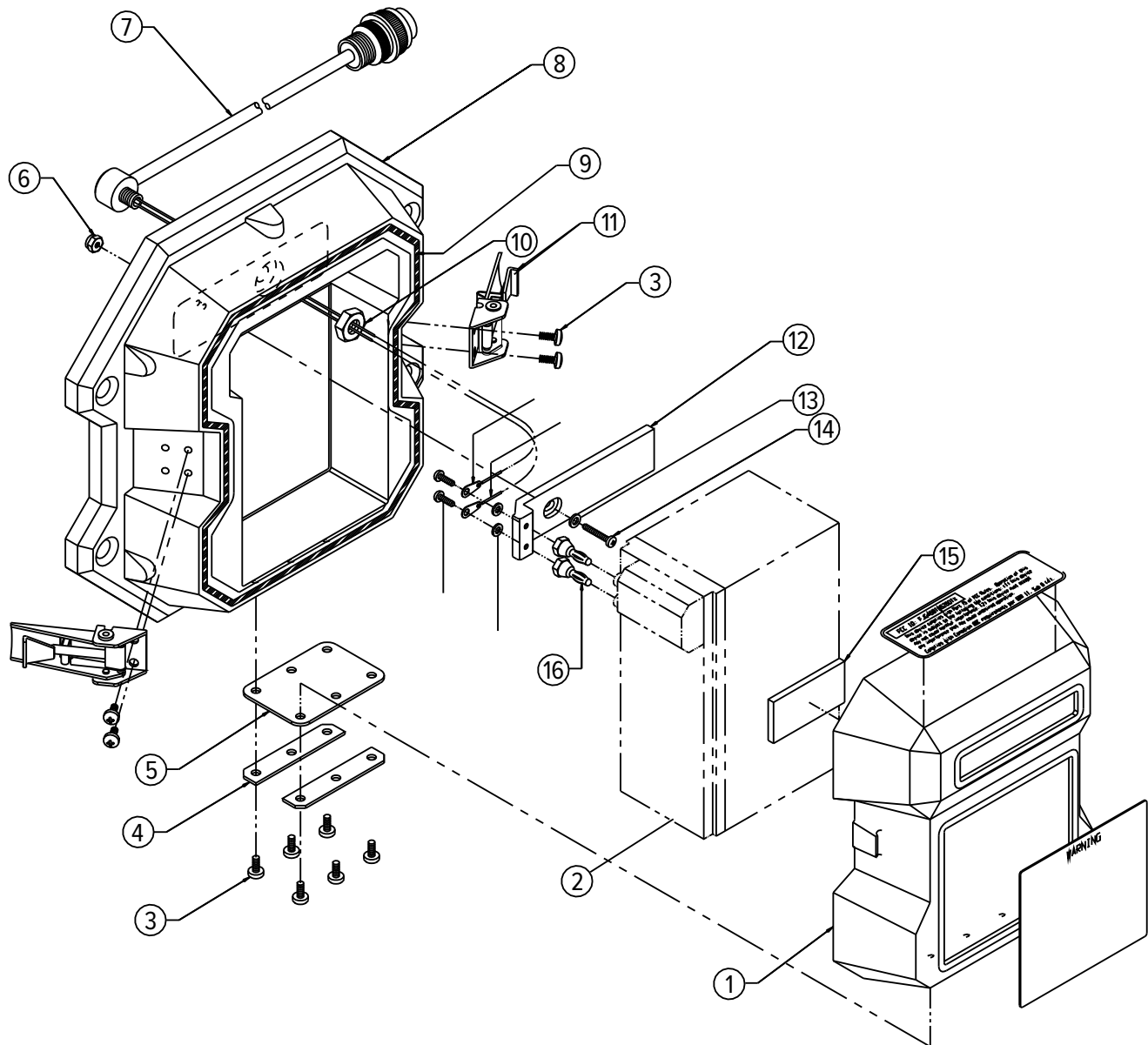
Part Number/Price

Item #	Part #	Description	Price
1	150516	Battery door machined	\$97.00
2	150367	Battery	\$170.00
3	146107	Screw pan head 8-32 x 5/16 type f stainless steel Phillips	\$4.00
4	149718	Plate aluminum battery door	\$14.00
5	149719	Fastener battery door rubber	\$11.00
6	146627	Nut hex 6-32 nyloc stainless steel	\$4.00
7	133798	Cable assembly power molded feed through	\$150.00
8	150517	Battery well machined with o-ring	\$350.00
9	149723	O-ring assembly battery well casting	\$14.00
10	146661	Nut hex 5/16-18 jam stainless steel	\$4.00
11	145934	Latch camloc	\$40.00
12	150073	Conn block	\$28.00
13	55124	Washer, flat #6 cres	\$1.00
14	127036	Screw, machine 6-32 x 3/4 Phillips pan head 18-8 stainless steel	\$4.25
15	146640	Pad poron 2.0 x 1.0	\$4.00
16	147825	Plug banana jack	\$12.00

REPLACEMENT PARTS

MSI-4260B

Battery Casting Assembly



REPLACEMENT PARTS

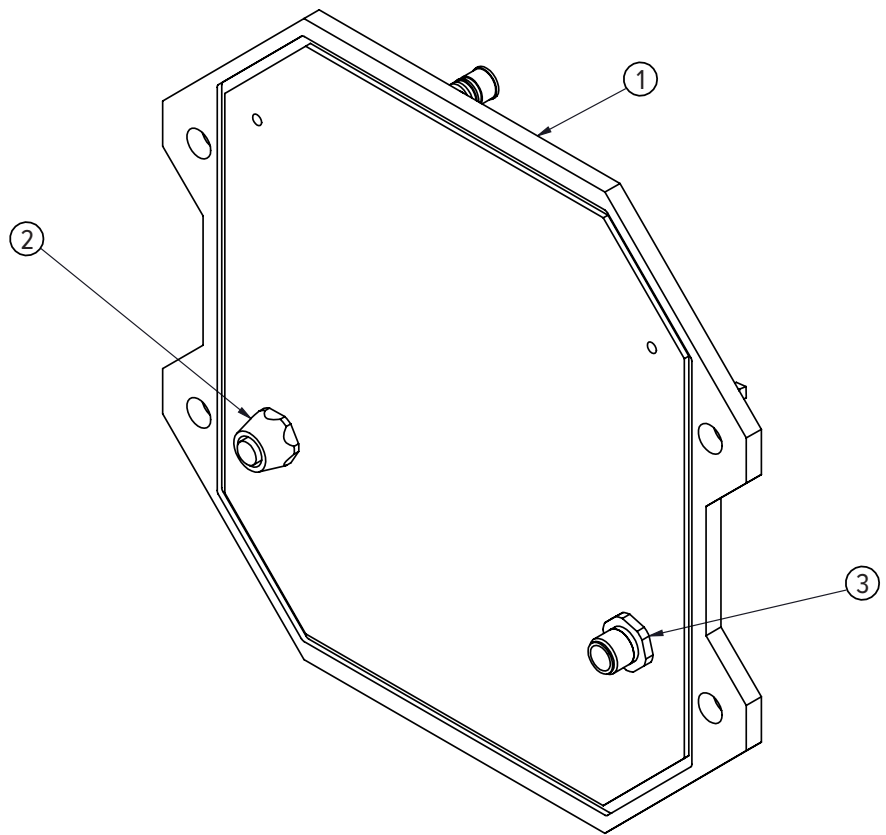
MSI-4260B

Bulkhead Assembly

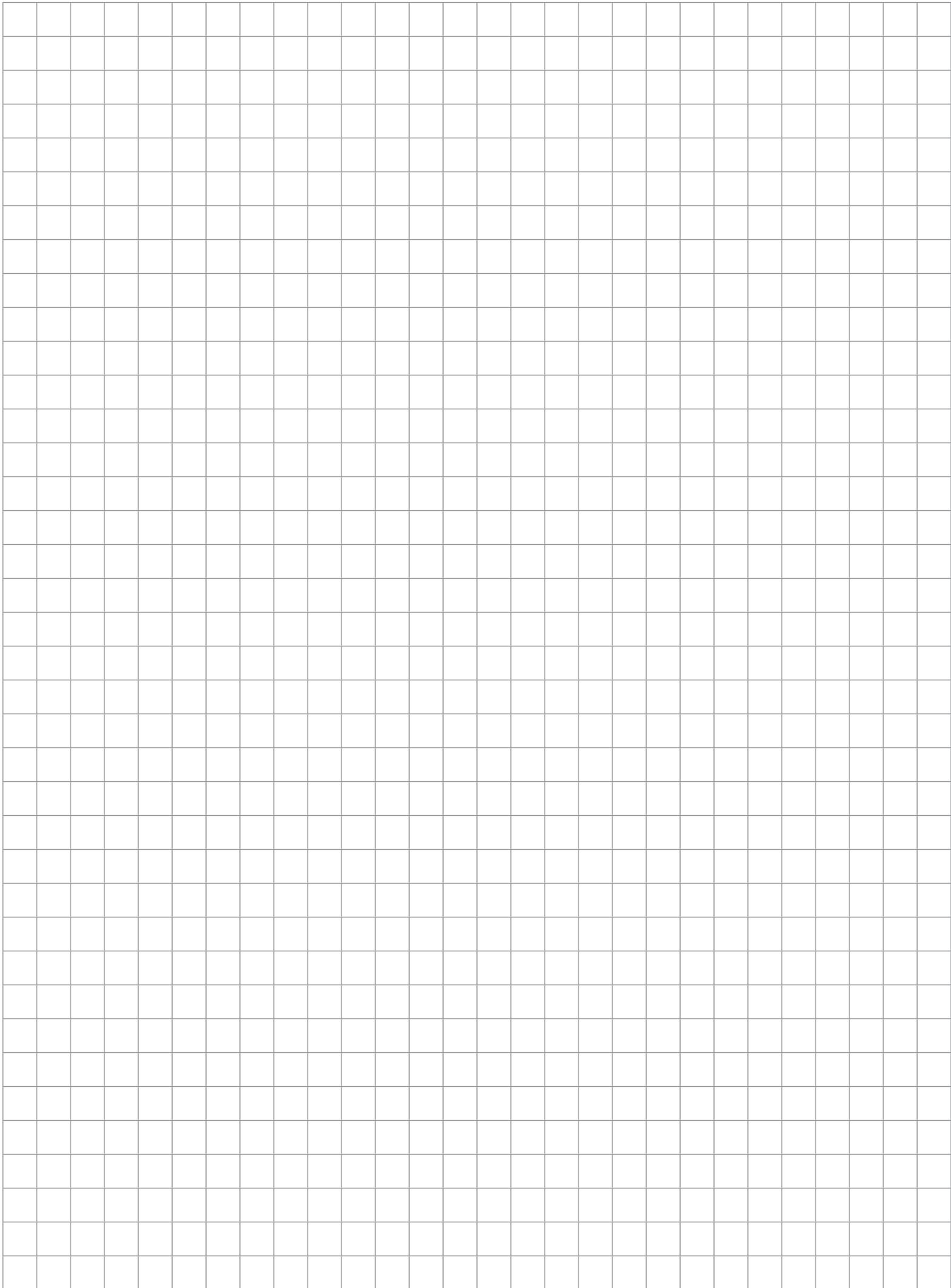


Part Number/Price

Item #	Part #	Description	Price
1	149469	Bulkhead	\$155.00
2	139471	Cable assembly bulkhead load cell 12.0 in	\$90.00
3	139472	Cable assembly bulkhead power 12.0 in	\$49.00



REPLACEMENT PARTS



MSI-4260C

Front Casting Assembly



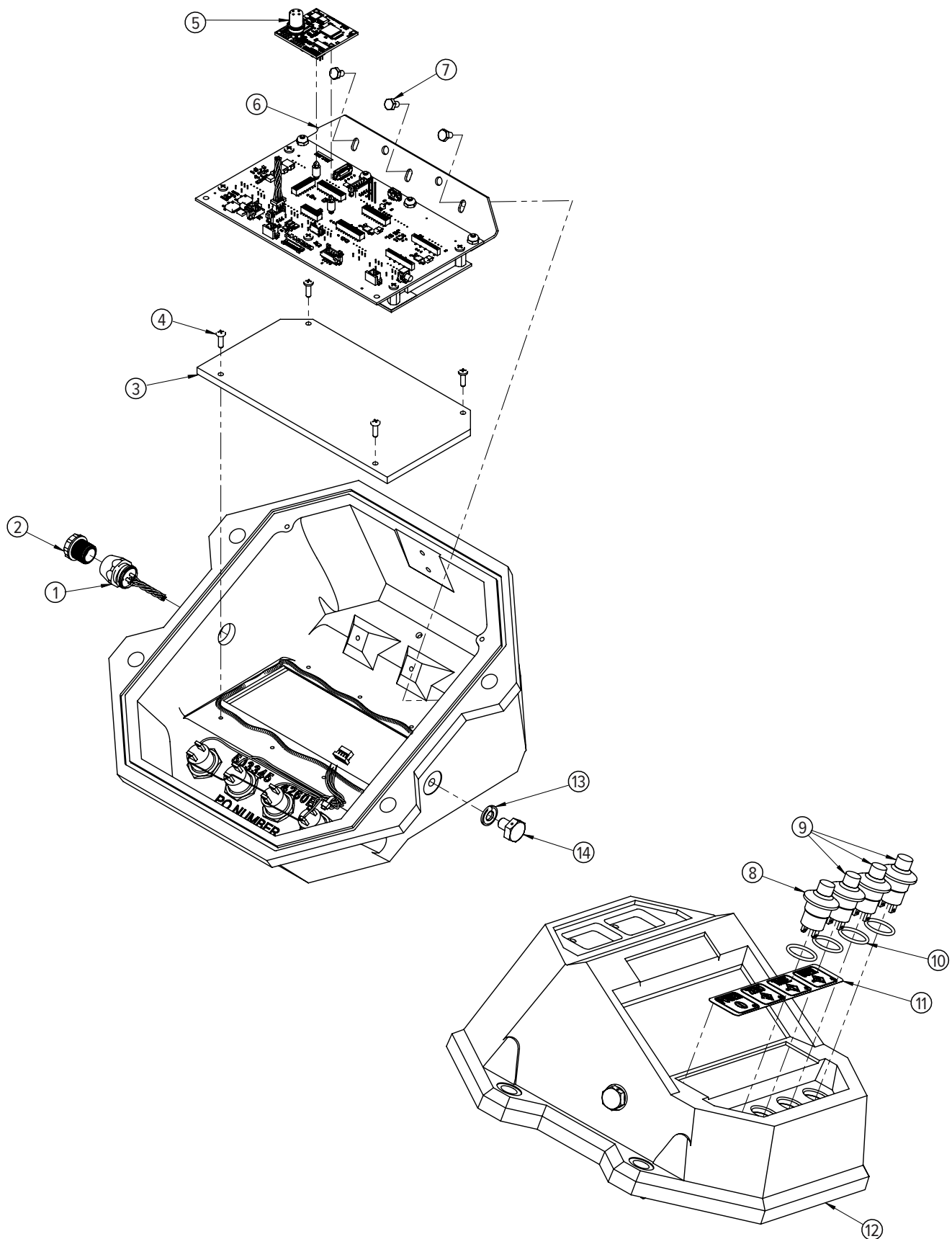
Part Number/Price

Item #	Part #	Description	Price
1	139449	Cable assembly comm serial data RS-232	\$56.00
2	143352	Conn closure cap IP68 male	\$4.00
3	200270	Window LED	\$61.00
4	128140	Screw, machine 4-40 x 3/8 Phillips pan head 18-8 stainless steel	\$4.00
5	153429	PCA ScaleCore3 1-channel	\$310.00
6	199849	Display assembly	\$550.00
7	146022	Bolt HH 6-32 x 1/4 cap stainless steel	\$4.00
8	147562	Switch P3-31111W watertight red	\$48.00
9	147563	Switch P3-31112W watertight black	\$46.00
10	146251	O-ring 70 durometer	\$4.00
11	149506	Label switch	\$14.00
12	149481	Front casting and machining	\$425.00
13	142472	Washer seal Stat-O-Seal® 1/4 in	\$5.00
14	142209	Screw seal hex stainless steel 1/4-20	\$14.00

REPLACEMENT PARTS

MSI-4260C

Front Casting Assembly



REPLACEMENT PARTS

MSI-4260C

Mid-Section Assembly (S-beam Load Cell) (500 to 10,000 lb)



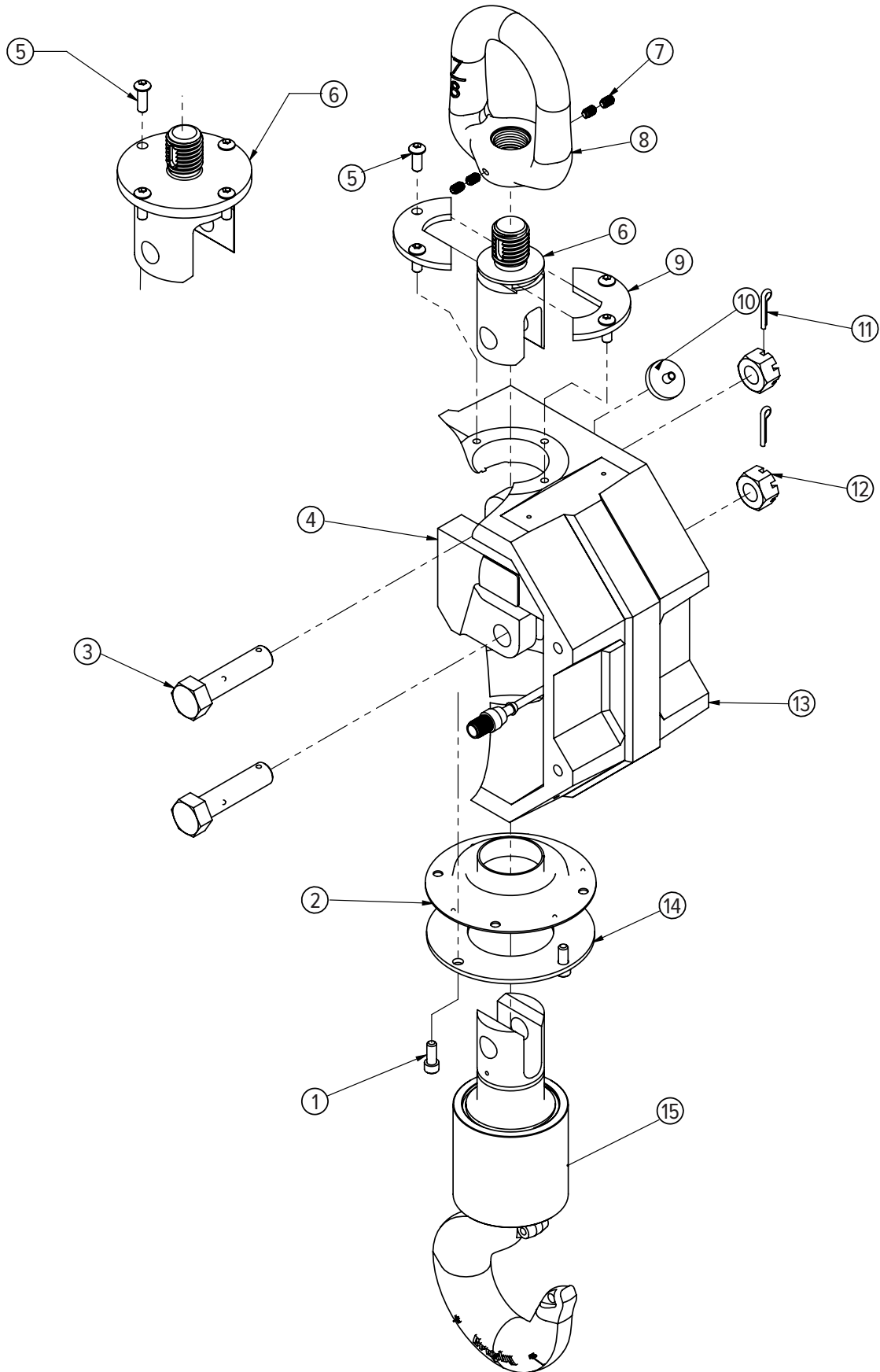
Part Number/Price

Item #	Part #	Description	Price
1	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00
2	149710	Seal link lower	\$49.00
3	148457	Bolt clevis hex head 5/8 × 1.75 grip with thread protectors	\$26.00
3	149217	Bolt clevis hex head 5/8 × 2.75 grip with thread protectors	\$34.00
4	138661	Load cell assembly 500 lb S-beam	\$1,270.00
4	138662	Load cell assembly 1 K/2 K S-beam	\$1,270.00
4	138663	Load cell assembly 5 K S-beam	\$1,750.00
4	138664	Load cell assembly 10 K S-beam	\$1,780.00
5	72031	Screw, cap 1/4-20NC × 5/8 hex socket button head stainless steel	\$1.25
6	148271	Upper link 500 lb/10 K	\$270.00
7	128799	Screw, set 1/4-20 × 3/8 socket head cup point 18-8 stainless steel	\$4.00
8	139795	Eye nut #7 500 lb to 2 K	\$220.00
8	148225	Eye nut 5/10K	\$280.00
9	148274	Collar top half 500 lb/10 K	\$40.00
10	146322	Filter millipore	\$10.00
11	15238	Pin, cotter 1/8 × 1 extended prong stainless steel	\$1.25
12	142832	Nut hex slotted 5/8 - 11	\$4.00
13	149175	Casting mid section 5 K	\$375.00
14	148259	Collar 500 lb/10 K	\$49.00
14	149168	Collar 10 K S-beam 9300	\$65.00
15	135043	Swivel hook assembly 500 lb/2 K	\$1,700.00
15	143236	Latch safety assembly 500 lb/2 K	\$28.00
15	134523	Swivel hook assembly 5/10 K S-beam	\$1,425.00
15	143233	Latch safety assembly 5/10 K	\$45.00

REPLACEMENT PARTS

MSI-4260C

Mid-Section Assembly (S-beam Load Cell) (500 to 10,000 lb)



REPLACEMENT PARTS

MSI-4260C

Mid-Section Assembly (20,000 to 30,000 lb)



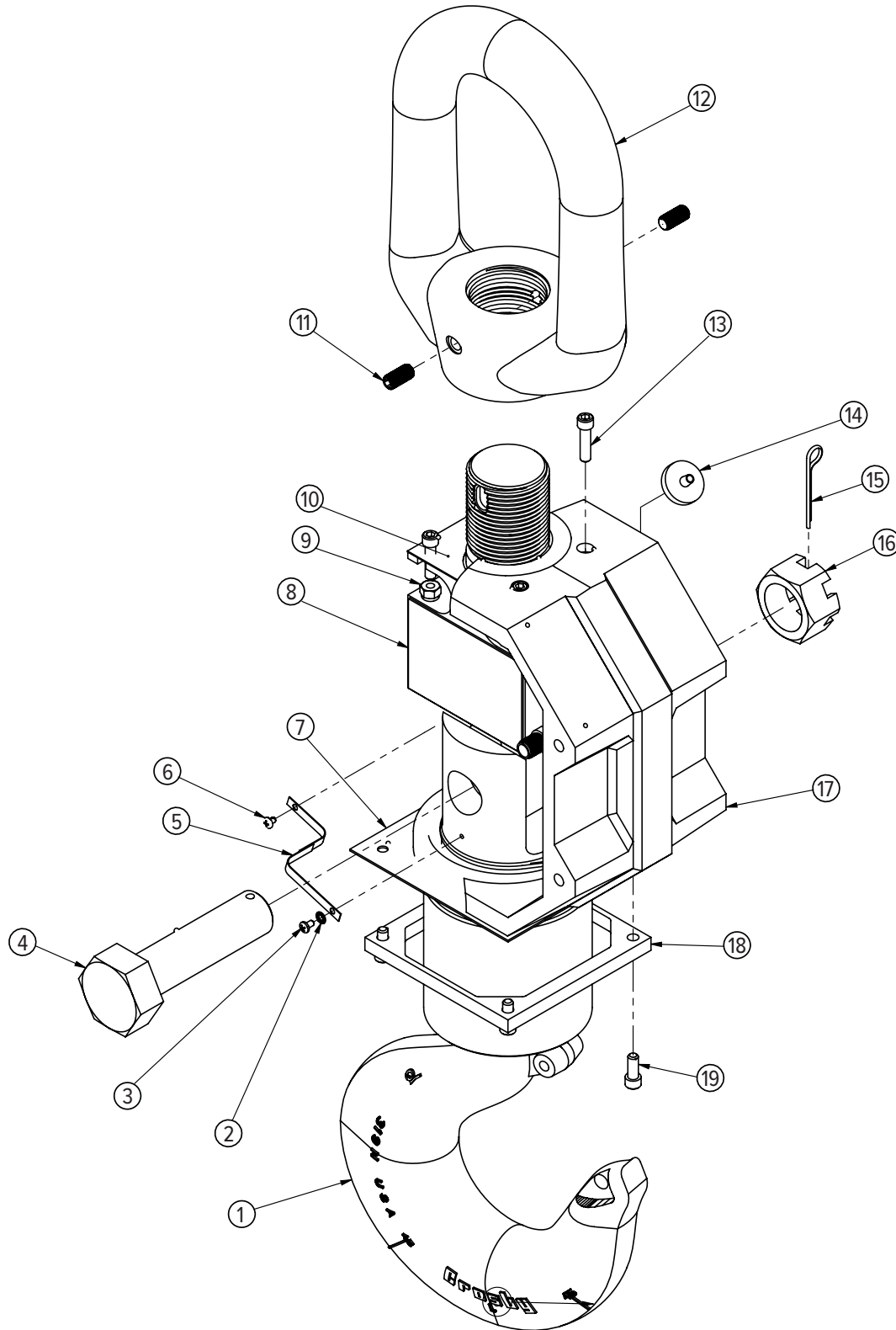
Part Number/Price

Item #	Part #	Description	Price
1	134938	Swivel hook assembly 20 K	\$2,790.00
1	134939	Swivel hook assembly 30 K	\$3,620.00
1	110661	Latch assembly 20 K	\$44.00
1	143235	Latch assembly 30 K	\$115.00
2	81280	Washer, lock no 6 type A	\$11.00
3	146601	Screw ph 6-32 × 1/4 phil	\$4.00
4	148458	Bolt clevis hex head 1.125-4 × 4.2 grip with thread protectors	\$86.00
5	139843	Ground strap cable	\$14.00
6	146101	Screw ph 6-32 × 3/16 type	\$4.00
7	149957	Boot lower 20 to 70 K	\$86.00
8	137763	Load cell assembly 20/30 K standard	\$2,240.00
9	146631	Nut hex 1/4-20 nyloc stainless steel	\$4.00
10	149976	Gasket upper 20/30 K Port-A-Weigh gasket	\$6.00
11	146081	Screw set 3/8-24 × 3/4 cup point stainless steel	\$3.00
12	148110	Eye nut 20/30K galvanized	\$635.00
13	81405	Screw, socket head 1/4-20 UNC × 1 18-8 stainless steel	\$1.25
14	146322	Filter millipore	\$10.00
15	142186	Cotter pin 3/16 × 2 stainless steel	\$4.00
16	142833	Nut hex slotted 1.125 - 7 zinc plated	\$12.00
17	150523	Mid-section machined 20/30 K	\$510.00
18	149958	Collar bottom 20 to 50 K	\$140.00
19	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00

REPLACEMENT PARTS

MSI-4260C

Mid-Section Assembly (20,000 to 30,000 lb)



REPLACEMENT PARTS

MSI-4260C

Mid-Section Assembly (50,000 to 70,000 lb)



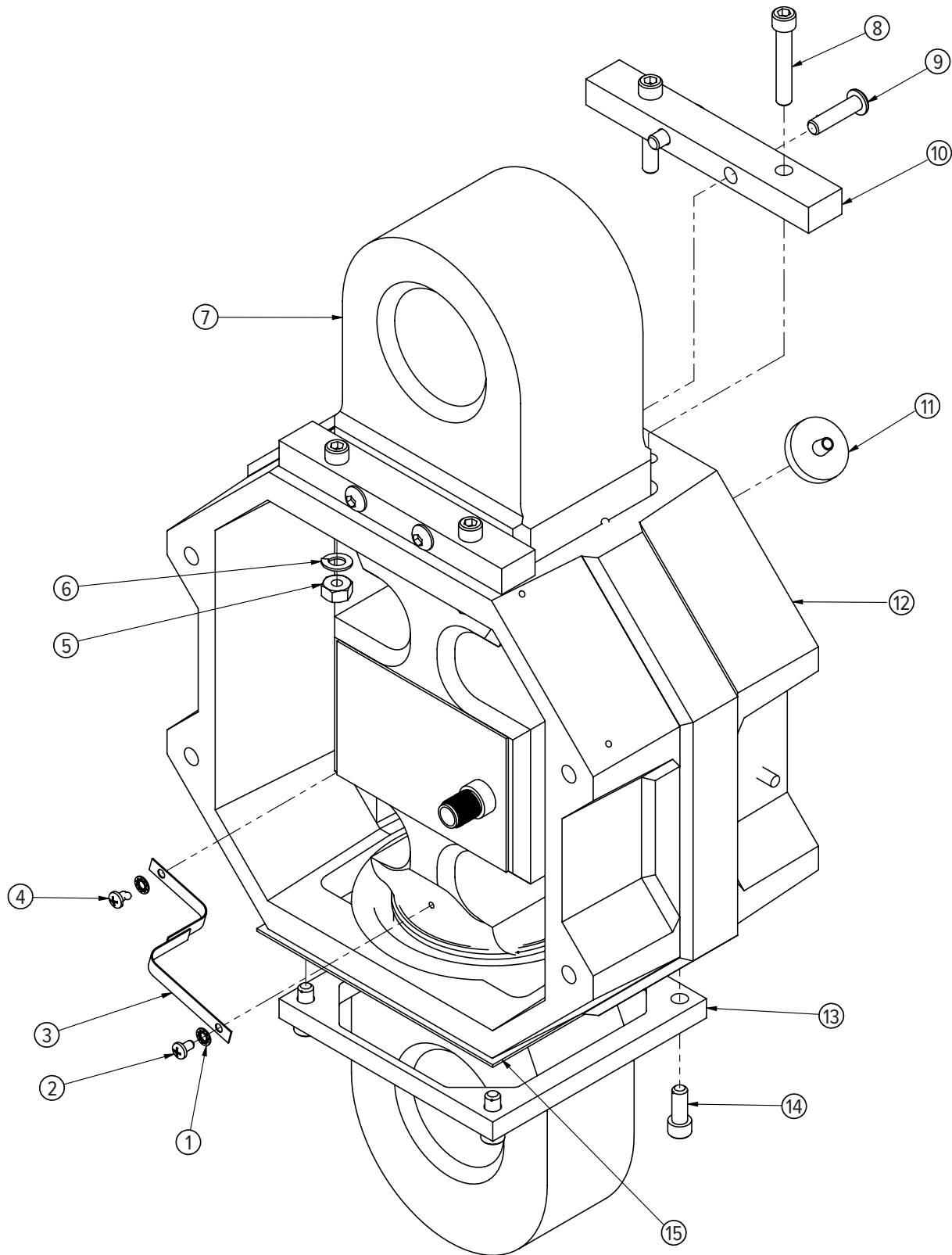
Part Number/Price

Item #	Part #	Description	Price
1	81280	Washer, lock no 6 type A	\$11.00
2	146601	Screw ph 6-32 × 1/4 phil	\$4.00
3	139843	Ground strap cable	\$14.00
4	146101	Screw ph 6-32 × 3/16 type	\$4.00
5	14642	Nut, 1/4-20NC hex stainless steel	\$4.00
6	15148	Washer, lock 1/4 regular	\$1.25
7	137764	Load cell assembly 50/70 K standard	\$5,330.00
8	117599	Screw, cap 1/4-20NC × 1-1/2 hex socket head 18-8 stainless steel	\$4.00
9	145982	Screw button head 1/4-20 × 1 stainless steel socket head	\$4.00
10	148213	Collar top 50/100 K	\$97.00
11	146322	Filter millipore	\$10.00
12	150525	Mid-section machined 50/100 K	\$515.00
13	149958	Collar bottom 20 to 50 K	\$140.00
14	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00
15	149957	Boot lower 20 to 70 K	\$86.00
Additional Parts Available			
	135035	Hook, swivel, 50,000 lb	\$8,390.00
	142179	Latch, safety (fits 135035 hook)	\$170.00
	135036	Hook, swivel, 70,000 lb	\$11,750.00
	142180	Latch, safety (fits 135036 hook)	\$220.00
	151356	Shackle, 25 T, 50,000 lb	Consult
	146335	Shackle, 40 T, 70,000 lb	Consult

REPLACEMENT PARTS

MSI-4260C

Mid-Section Assembly (50,000 to 70,000 lb)



REPLACEMENT PARTS

MSI-4260C

Battery Casting Assembly



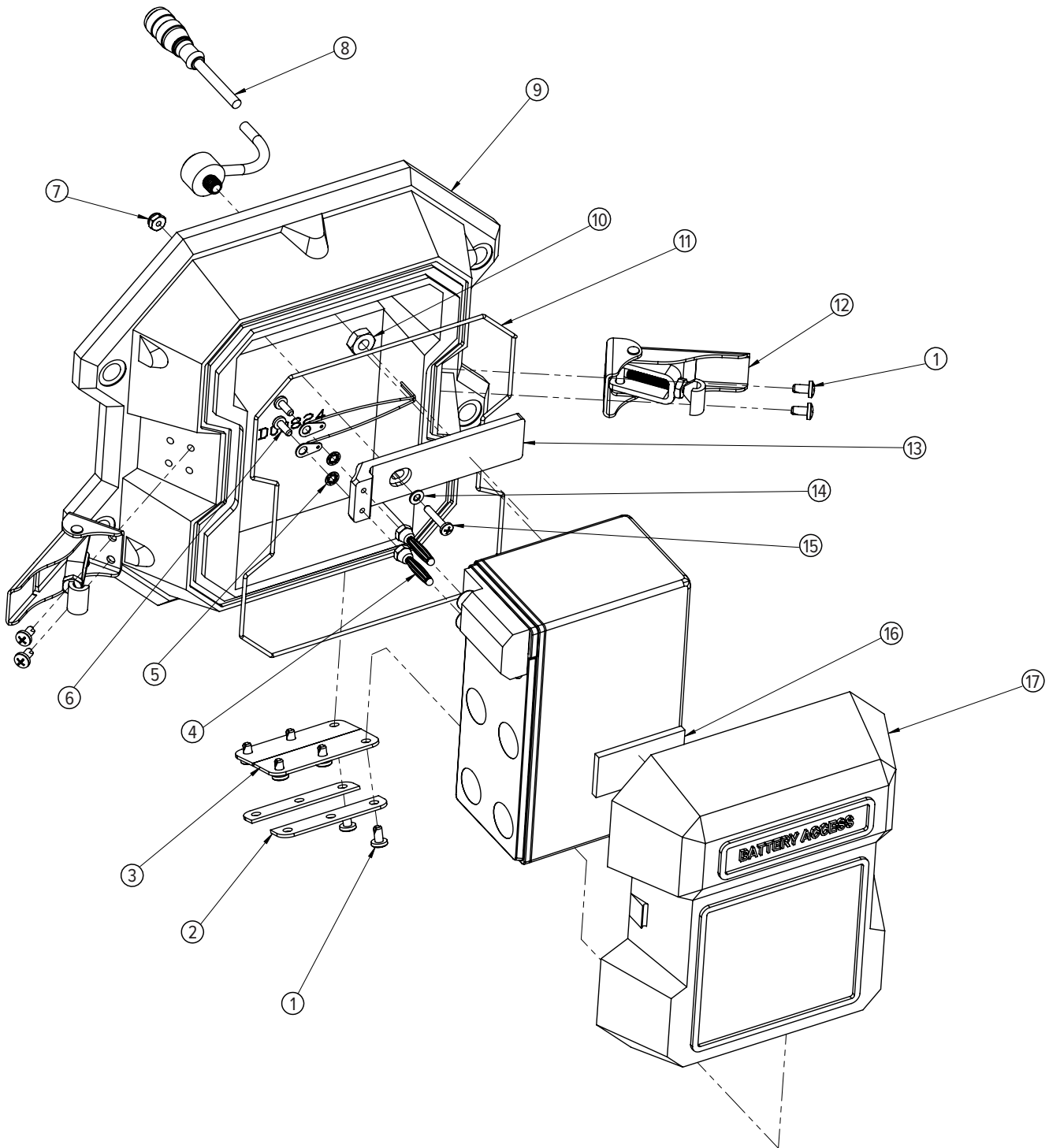
Part Number/Price

Item #	Part #	Description	Price
1	146108	Screw ph 8-32 x 3/8 type	\$4.00
2	149718	Plate aluminum battery door	\$14.00
3	149719	Fastener battery door rubber	\$11.00
4	147825	Plug banana jack	\$12.00
5	81280	Washer, lock no 6 type A	\$11.00
6	146603	Screw ph 6-32 x 3/8 phil	\$4.00
7	146627	Nut hex 6-32 nyloc stainless steel	\$4.00
8	133798	Cable assembly power molded feed through	\$150.00
9	150517	Battery well machined with o-ring	\$350.00
10	146661	Nut hex 5/16-18 jam stainless steel	\$4.00
11	149723	O-ring assembly battery well casting	\$14.00
12	145934	Latch camloc	\$40.00
13	150073	Conn block	\$28.00
14	55124	Washer, flat #6 cres	\$1.00
15	127036	Screw, machine 6-32 x 3/4 Phillips pan head 18-8 stainless steel	\$4.25
16	146640	Pad poron 2.0 x 1.0	\$4.00
17	150516	Battery door machined	\$97.00

REPLACEMENT PARTS

MSI-4260C

Battery Casting Assembly



REPLACEMENT PARTS

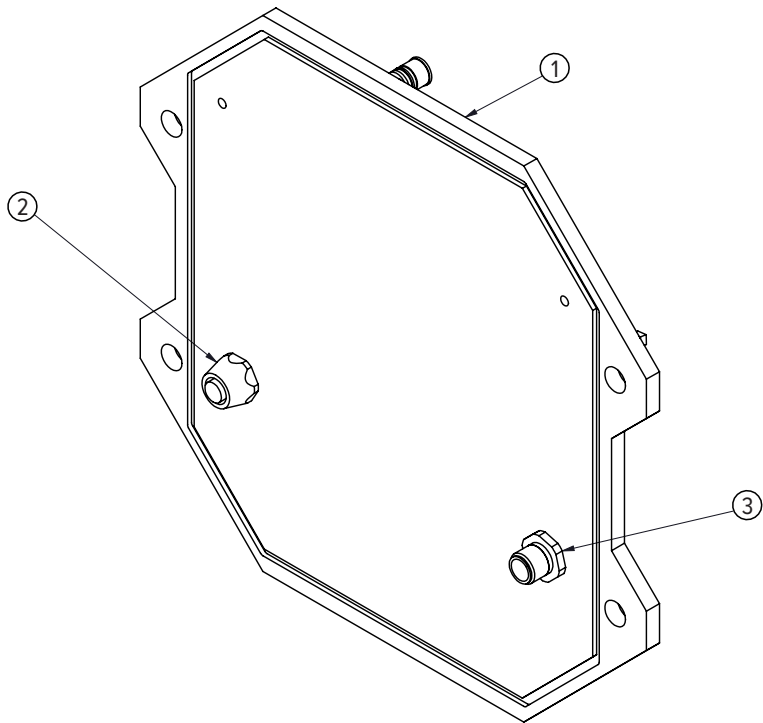
MSI-4260C

Bulkhead Assembly

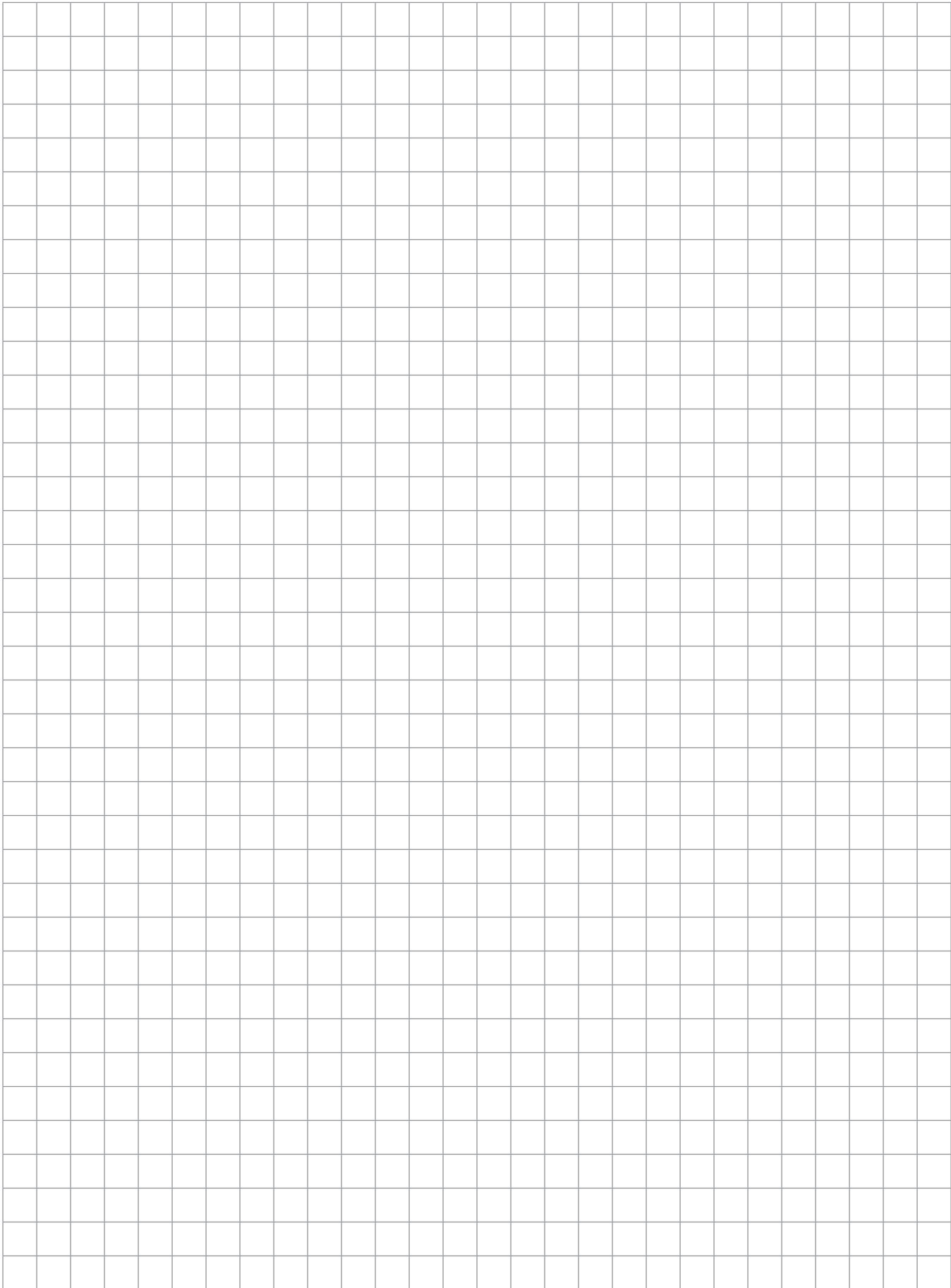


Part Number/Price

Item #	Part #	Description	Price
1	149469	Bulkhead	\$155.00
2	139471	Cable assembly bulkhead load cell 12.0 in	\$90.00
3	139472	Cable assembly bulkhead power 12.0 in	\$49.00



REPLACEMENT PARTS



MSI-4260M Industrial

Front Casting Assembly



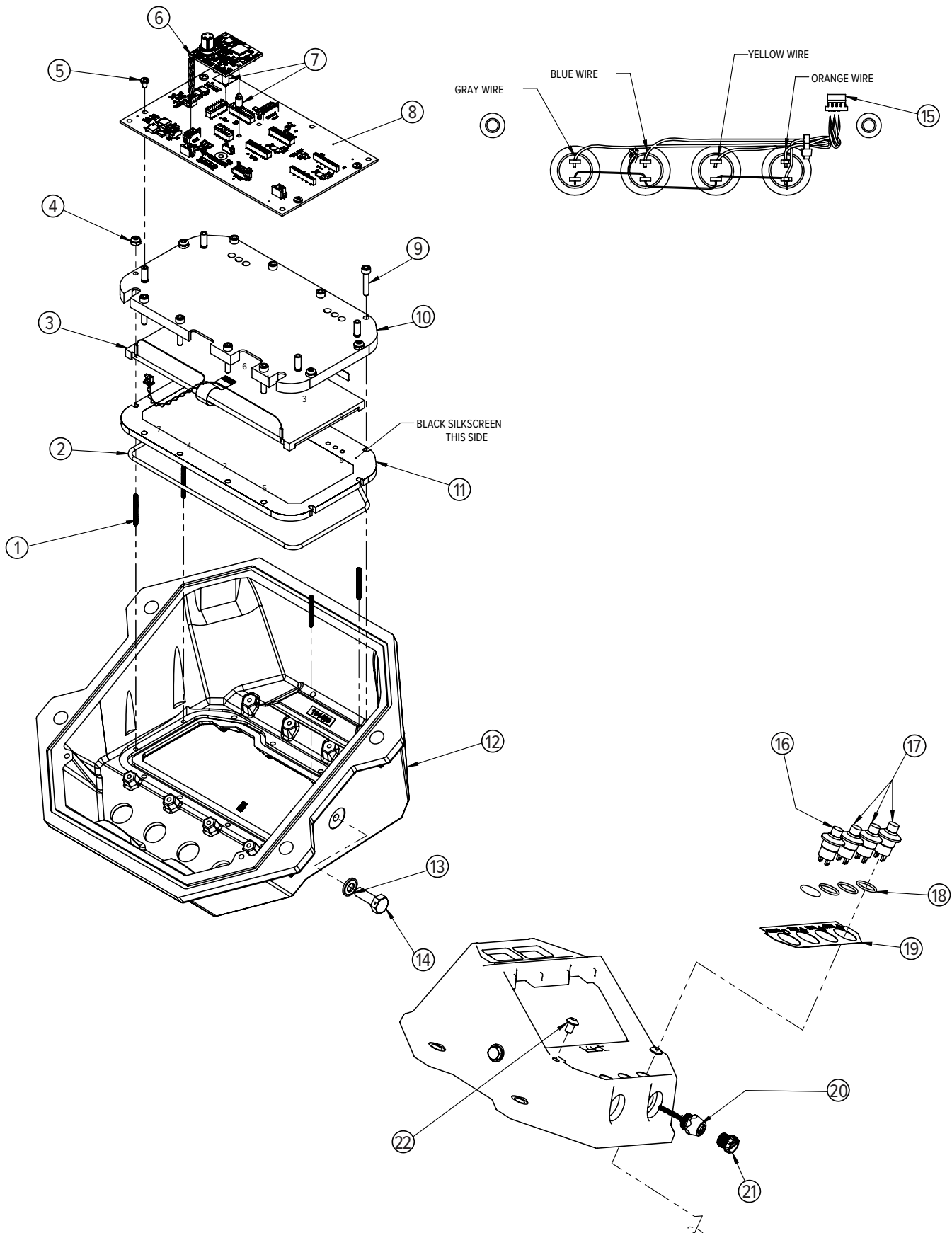
Part Number/Price

Item #	Part #	Description	Price
1	196566	Screw set allen dr cp stainless steel 4-40 1.0 LG	\$4.00
2	182066	O-ring 5.737 × 0.103 nitrile	\$4.00
3	195333	LCD module	\$120.00
4	146625	Nut hex 4-40 nyloc stainless steel	\$4.00
5	146593	Screw pan head 4-40 × 3/16 Phillips stainless steel	\$4.00
6	153429	PCA ScaleCore 3 1-channel w/ Turck insert - controlled	\$310.00
7	144929	Spacer miniature dual locking 6 mm long	\$7.00
8	191081	PCA 5-digit LCD	\$410.00
9	200637	Screw, cap 6-32NC × 3/4 hex socket head 18-8 stainless steel	\$4.00
10	196524	LCD bracket	\$110.00
11	196523	LCD window	\$105.00
12	203000	Front casting LCD display	\$475.00
13	142472	Washer seal Stat-O-Seal® 1/4 in	\$5.00
14	153203	Screw hex 1/4-20 × .375 UNC drilled hd stainless steel	\$11.00
15	139448	Cable assembly switch harness	\$96.00
16	147562	Switch P3-31111W watertight red	\$48.00
17	147563	Switch P3-31112W watertight black	\$46.00
18	146251	O-ring 70 durometer for use with PG11 feed through	\$4.00
19	194709	Overlay switches	\$32.00
20	139449	Cable assembly comm serial data RS-232	\$56.00
21	143352	Connector closure cap IP68 male	\$4.00
22	198460	Screw, cap 1/4-20 × 3/8 hex socket button head stainless steel	\$4.00

REPLACEMENT PARTS

MSI-4260M Industrial

Front Casting Assembly



MSI-4260M Industrial

Mid-Section Assembly (500 to 10,000 lb)



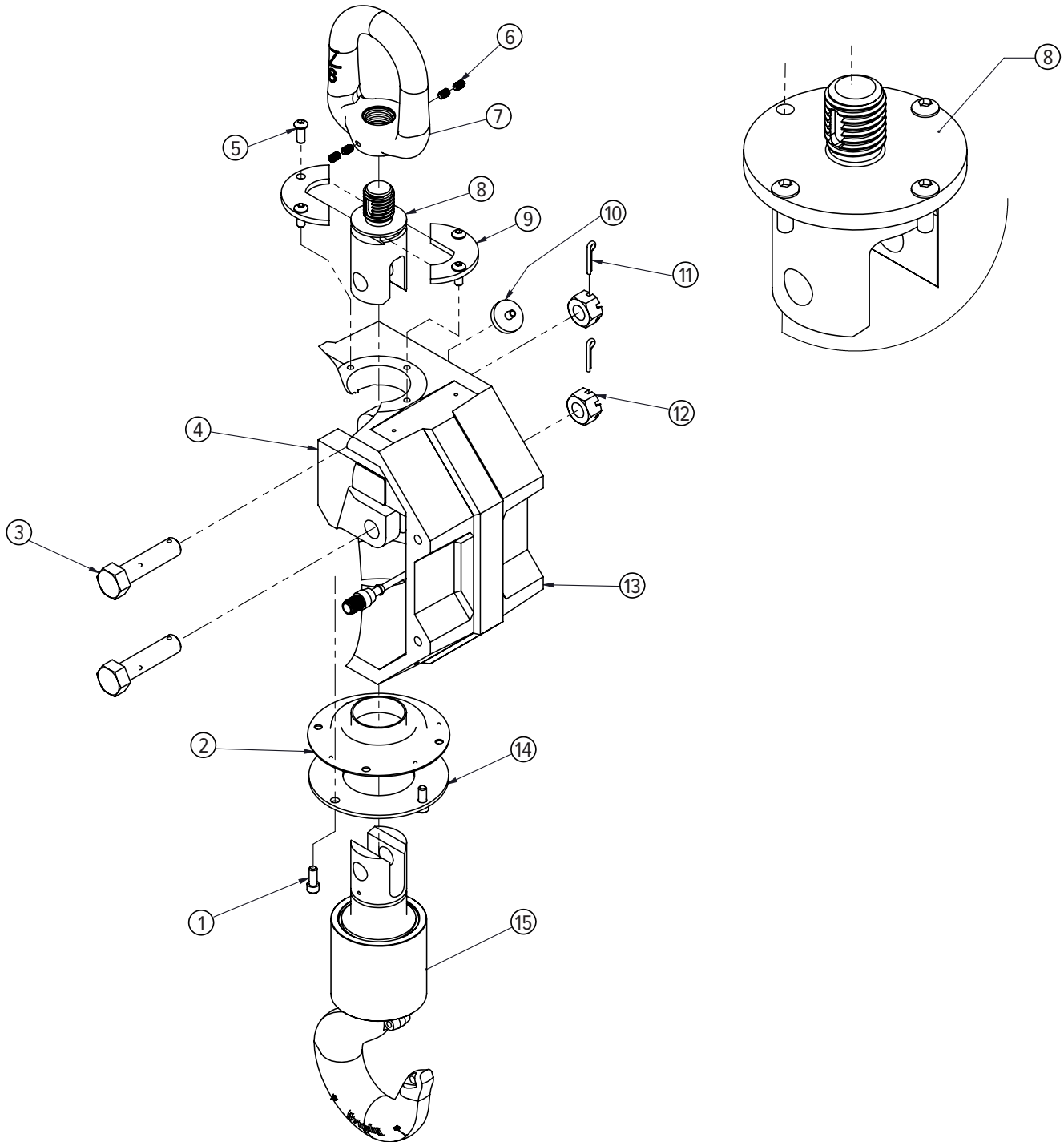
Part Number/Price

Item #	Part #	Description	Price
1	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00
2	149165	Seal lower link	\$62.00
2	149710	Seal lower link	\$49.00
3	149217	Bolt clevis hex head 5/8 × 2.75 grip	\$34.00
3	148457	Bolt clevis hex head 5/8 × 1.75 grip with thread protectors	\$26.00
4	138664	Load cell assembly 10 K S-beam	\$1,780.00
4	138663	Load cell assembly 5 K S-beam	\$1,750.00
4	138662	Load cell assembly 1 K/2 K S-beam	\$1,270.00
4	138661	Load cell assembly 500 lb S-beam	\$1,270.00
5	41251	Screw, cap 1/4-20NC × 3/4 hex socket button head stainless steel	\$4.00
5	72031	Screw, cap 1/4-20NC × 5/8 hex socket button head stainless steel	\$1.25
6	128799	Screw, set 1/4-20 × 3/8 socket head cup point 18-8 stainless steel	\$4.00
7	148225	Eye nut 5/10 K	\$280.00
7	139795	Eye nut #7 500 lb/2 K	\$220.00
8	149126	Upper link S-beam 5/10 K	\$455.00
8	148271	Upper link 500 lb/10 K	\$270.00
9	148274	Collar top half 500 lb/10 K	\$40.00
10	146322	Filter	\$10.00
11	15238	Pin, cotter 1/8 × 1 extended prong stainless steel	\$1.25
12	142832	Nut, hex slotted 5/8-11	\$4.00
13	150519	Mid section machined 500 lb/10 K without o-ring	\$585.00
14	148259	Collar 500 lb/10 K	\$49.00
15	134523	Swivel hook assembly 5/10 K S-beam	\$1,425.00
15	135043	Swivel hook assembly 500 lb/2 K S-beam	\$1,700.00

REPLACEMENT PARTS

MSI-4260M Industrial

Mid-Section Assembly (500 to 10,000 lb)



REPLACEMENT PARTS

MSI-4260M Industrial

Mid-Section Assembly (20,000 to 30,000 lb)



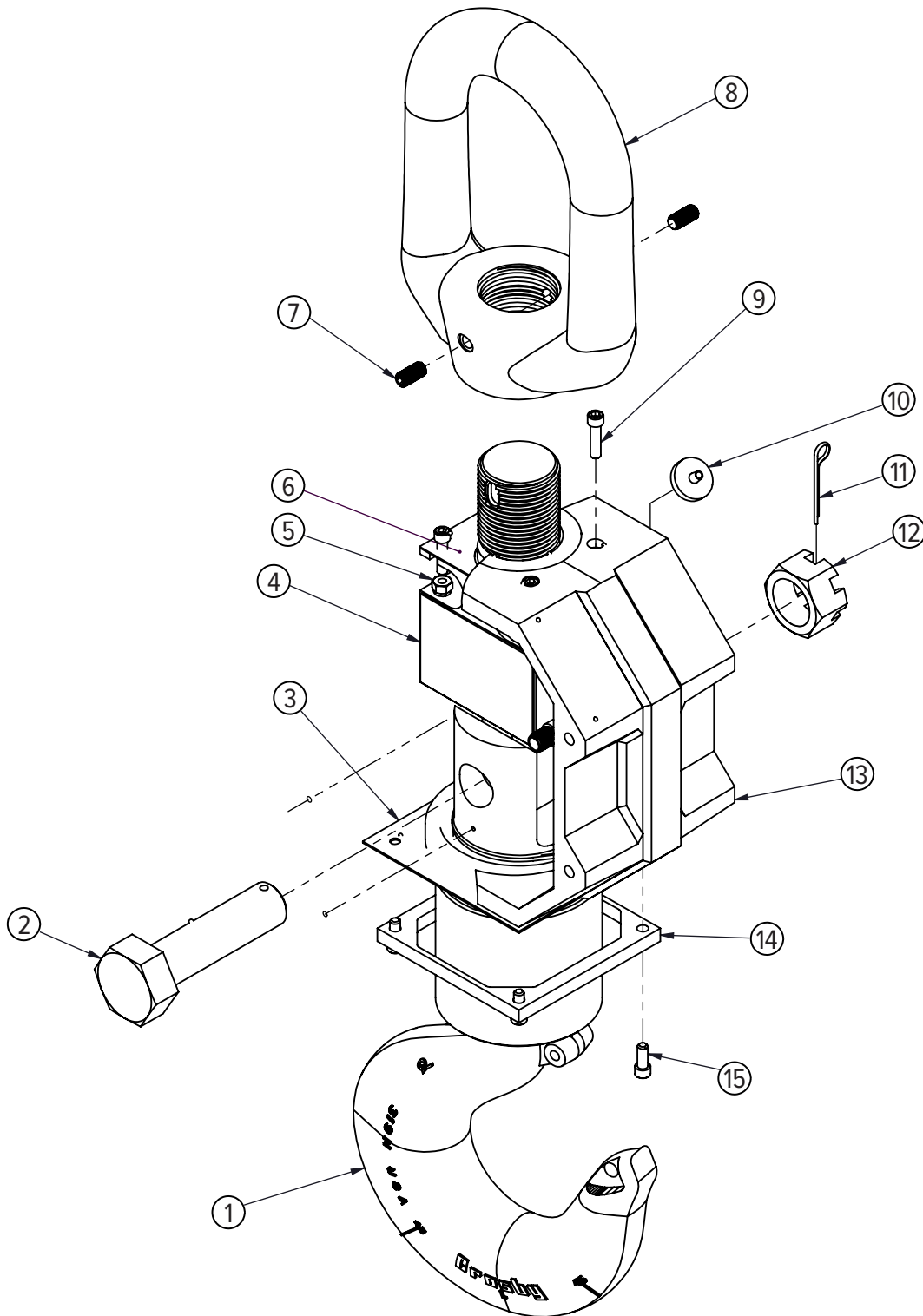
Part Number/Price

Item #	Part #	Description	Price
1	134938	Swivel hook assembly 20 K	\$2,790.00
1	134939	Swivel hook assembly 30 K	\$3,620.00
2	148458	Bolt clevis hex head 1.125-7 × 4.2 grip with thread protectors	\$86.00
3	149957	Boot lower 20 to 70 K	\$86.00
4	137763	Load cell assembly 20 K/30 K	\$2,240.00
5	146631	Nut hex 1/4-20 nyloc stainless steel	\$4.00
6	149976	Gasket upper 20 K/30 K Port-A-Weigh gasket	\$6.00
7	146081	Screw set 3/8-24 × 3/4 cup point stainless steel	\$3.00
8	148110	Eye nut 20 K/30 K galvanized	\$635.00
9	81405	Screw, socket head 1/4-20UNC×1 18-8 stainless steel	\$1.25
10	146322	Filter millipore	\$10.00
11	142186	Cotter pin 3/16 × 2	\$4.00
12	142833	Nut hex slotted 1.125 - 7 zinc pltd	\$12.00
13	150523	Mid section machined 20 K/30 K	\$510.00
14	149958	Collar bottom 20 to 50 K	\$140.00
15	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00

REPLACEMENT PARTS

MSI-4260M Industrial

Mid-Section Assembly (20,000 to 30,000 lb)



REPLACEMENT PARTS

MSI-4260M Industrial

Mid-Section Assembly (50,000 to 70,000 lb)



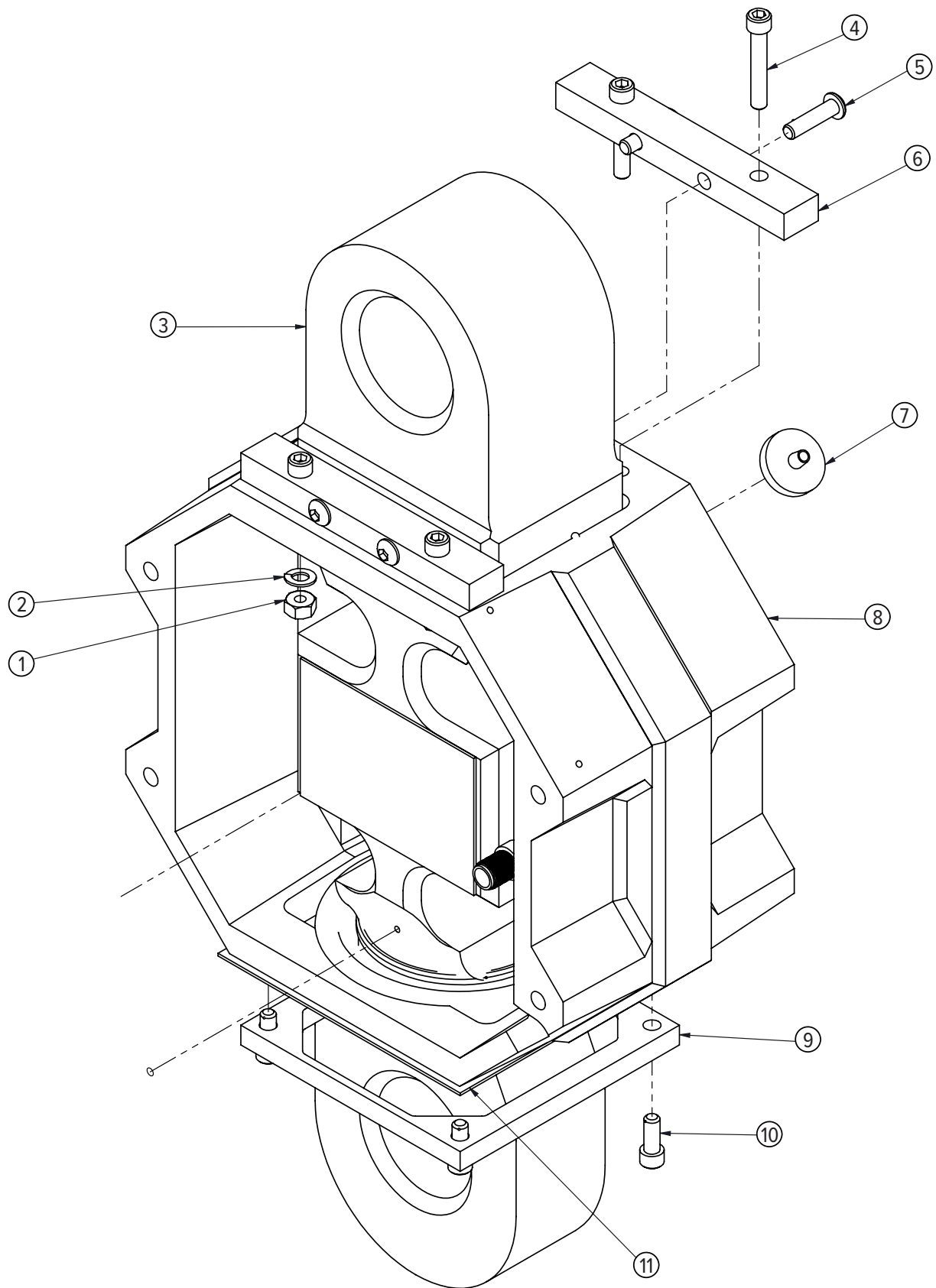
Part Number/Price

Item #	Part #	Description	Price
1	14642	Nut, 1/4-20NC hex stainless steel	\$4.00
2	15148	Washer, lock 1/4 regular helical spring stainless steel	\$1.25
3	137764	Load cell assembly 50 K/70 K standard	\$5,330.00
4	117599	Screw, cap 1/4-20NC×1-1/2 hex socket head 18-8 stainless steel	\$4.00
5	145982	Screw button head 1/4-20 × 1 stainless steel socket head	\$4.00
6	148213	Collar top 50 K/100 K	\$97.00
7	146322	Filter millipore	\$10.00
8	150525	Mid-section machined 50 K/100 K	\$515.00
9	149958	Collar bottom 20 to 50 K	\$140.00
10	145990	Screw socket head 1/4-20 × 5/8 stainless steel	\$4.00
11	149957	Boot lower 20 to 70 K	\$86.00
Additional Parts Available			
	151356	Shackle, 25 T, 50,000 lb	Consult
	146335	Shackle, 40 T, 70,000 lb	Consult
	135035	Hook, swivel 50,000 lb	\$8,390.00
	142179	Latch safety (fits PN 135035 hook)	\$170.00
	135036	Hook, swivel 70,000 lb	\$11,750.00
	142180	Latch safety (fits PN 135036 hook)	\$220.00

REPLACEMENT PARTS

MSI-4260M Industrial

Mid-Section Assembly (50,000 to 70,000 lb)



REPLACEMENT PARTS

MSI-4260M Industrial

Battery Casting Assembly



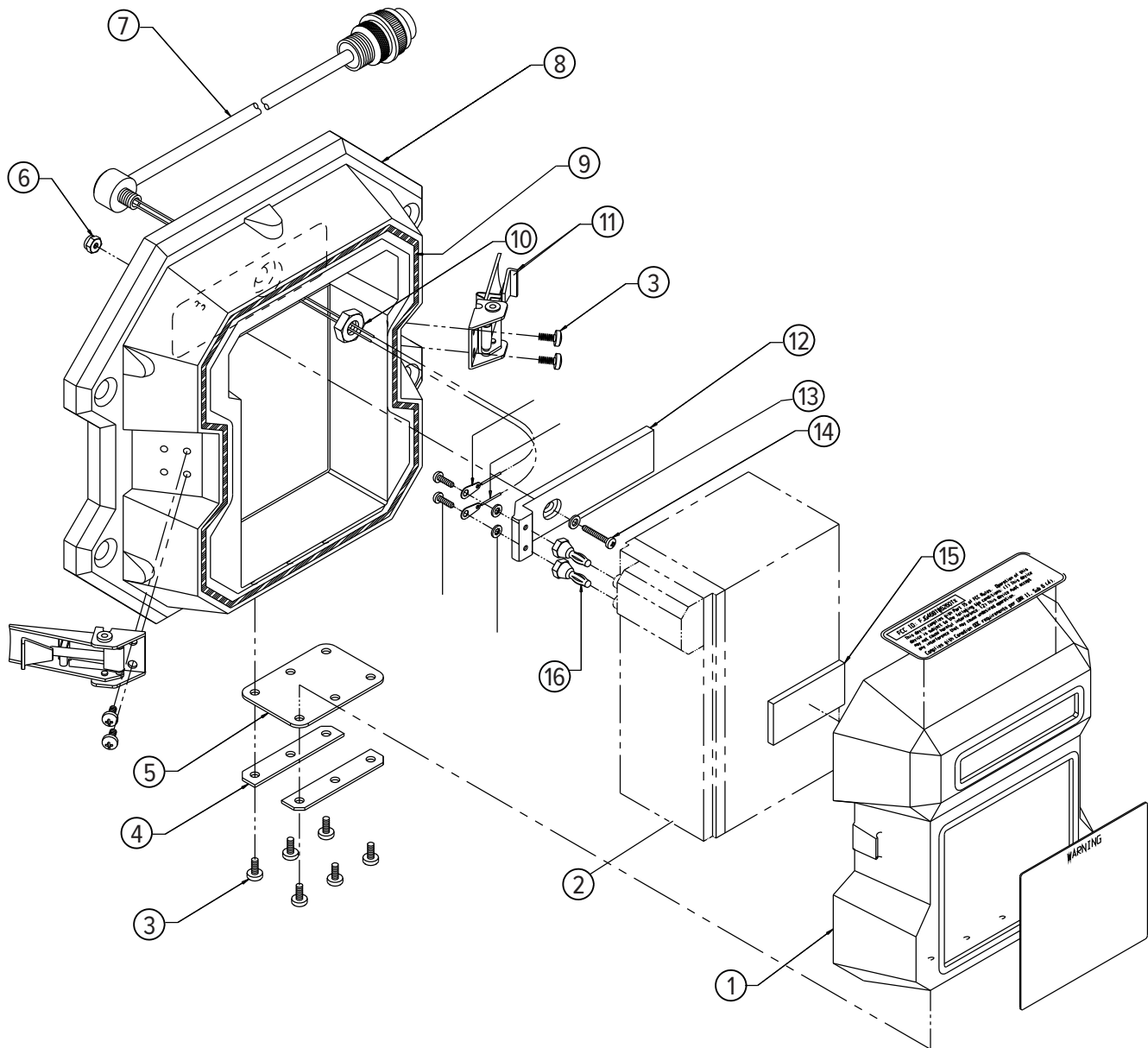
Part Number/Price

Item #	Part #	Description	Price
1	150516	Battery door machined	\$97.00
2	150367	Battery	\$170.00
3	146107	Screw pan head 8-32 × 5/16 type f stainless steel Phillips head	\$4.00
4	149718	Plate aluminum battery door	\$14.00
5	149719	Fastener battery door rubber	\$11.00
6	146627	Nut hex 6-32 nyloc stainless steel	\$4.00
7	133798	Cable assembly power molded feed through	\$150.00
8	150517	Battery well machined with o-ring	\$350.00
9	149723	O-ring assembly battery well casting	\$14.00
10	146661	Nut hex 5/16-18 jam stainless steel	\$4.00
11	145934	Latch camloc	\$40.00
12	150073	Connector block	\$28.00
13	55124	Washer, flat #6 cres	\$1.00
14	127036	Screw, machine 6-32 × 3/4 Phillips pan head 18-8 stainless steel	\$4.25
15	146640	Pad poron 2.0 × 1.0	\$4.00
16	147825	Plug banana jack	\$12.00

REPLACEMENT PARTS

MSI-4260M Industrial

Battery Casting Assembly



REPLACEMENT PARTS

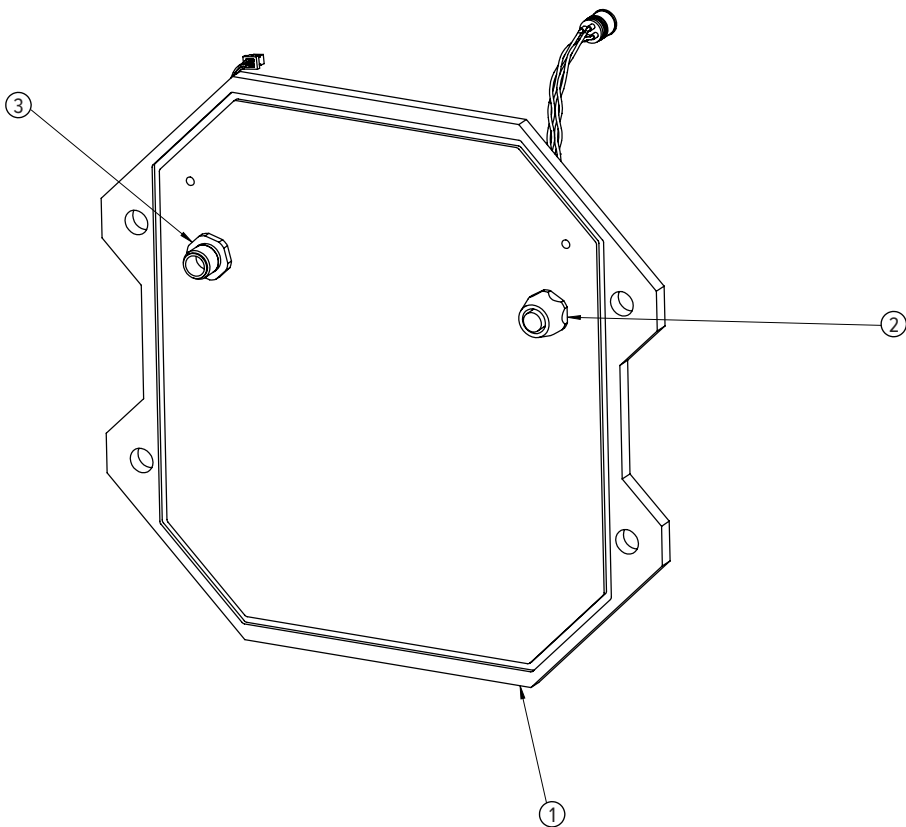
MSI-4260M Industrial

Bulkhead Assembly

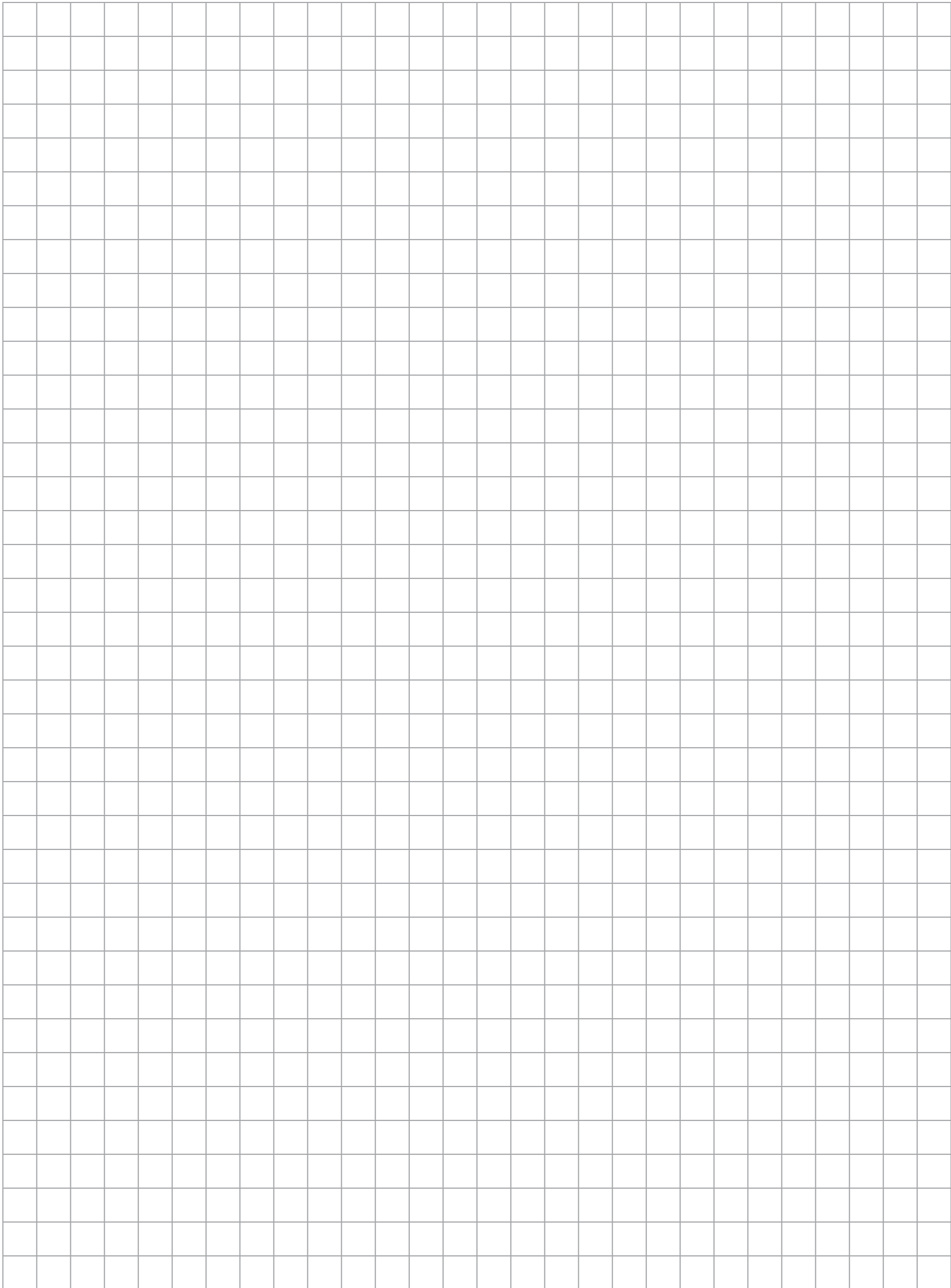


Part Number/Price

Item #	Part #	Description	Price
1	196355	Bulkhead front casting	Consult
2	139471	Cable assembly bulkhead load cell 12.0 in	\$90.00
3	139472	Cable assembly bulkhead power 12.0 in	\$49.00



REPLACEMENT PARTS



MSI-4260M Marine

Front Assembly



Part Number/Price

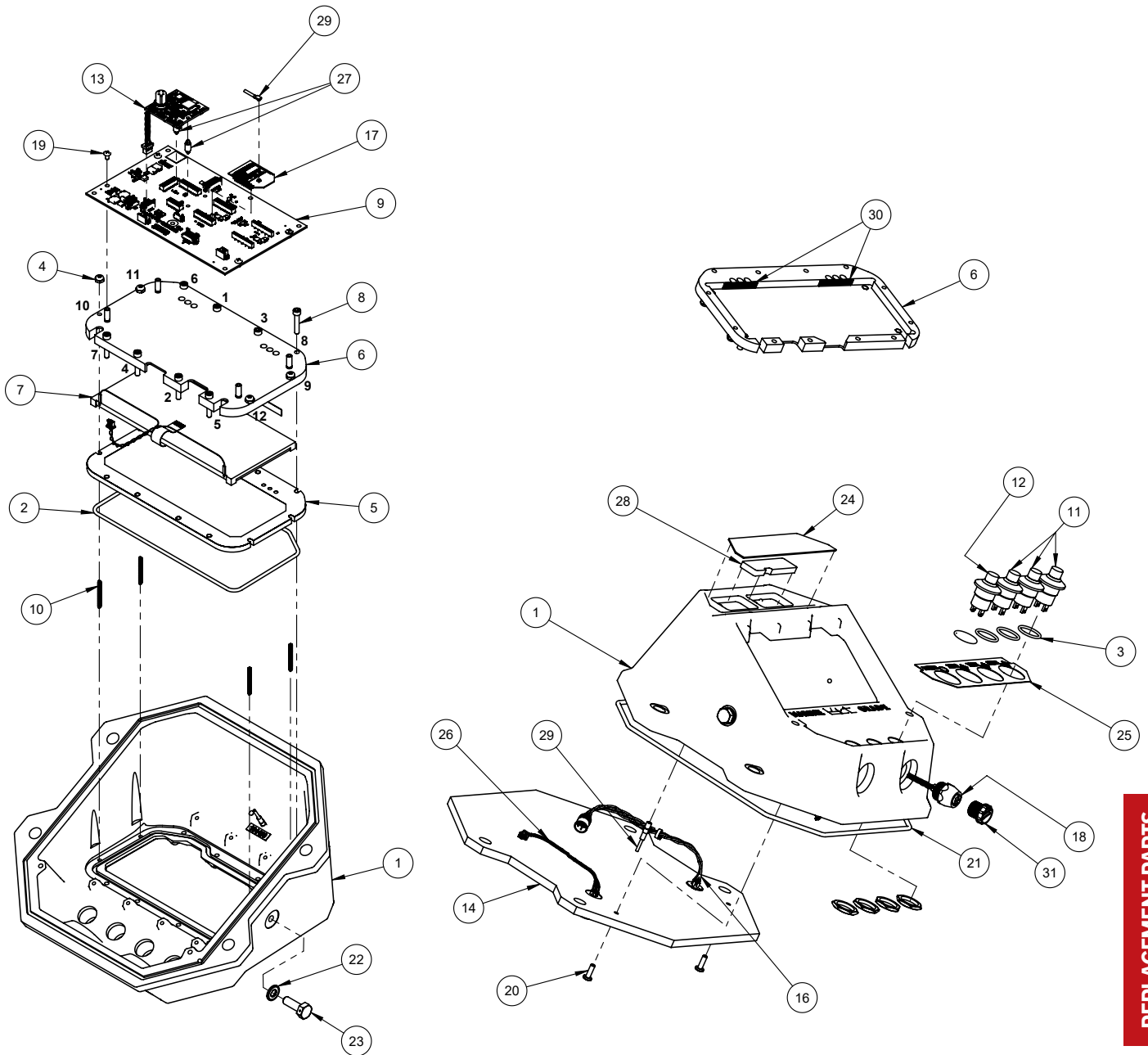
Item #	Part #	Description	Price
1	194469	Front casting 4260M	\$475.00
2	182066	O-ring 5.707 × .103	\$4.00
3	146251	O-ring ID .614 × .070 70 durometer	\$4.00
4	146625	Nut hex 4-40 nyloc stainless steel	\$4.00
5	196523	Window LCD 4260M	\$105.00
6	196524	Bracket LCD and electronics 4260M	\$110.00
7	195333	LCD display module 4260M	\$120.00
8	79567	Screw socket head 6-32 × 3/4 stainless steel	\$1.00
9	191081	PCA LCD 4260M	\$410.00
10	196566	Screw set 4-40 × 1.0 lg cp stainless steel	\$4.00
11	147563	Switch, black, watertight	\$46.00
12	147562	Switch, red, watertight	\$48.00
13	137805	PCA Scalecore 1 channel with Turck insert	\$310.00
14,16,26	196276	Bulkhead assembly front 4260M	\$325.00
15	139448	Cable assembly switch harness 4260B (not shown)	\$96.00
16	139471	Cable assembly bulkhead lc 4260B/4260M	\$90.00
17	144773	Radio module XBEE-PRO 802.15.4 U.FL connect	\$155.00
18	139449	Cable assembly comm serial data RS-232 4260B/4260M	\$56.00
19	146593	Screw pan head 4-40 × 3/16 Phillips stainless steel	\$4.00
20	146604	Screw pan head 6-32 × 7/16 Phillips stainless steel	\$4.00
21	149724	O-ring assembly front casting paw/Trans-Weigh 4260M	\$14.00
22	142472	Washer seal Stat-O-Seal® 1/4 in	\$5.00
23	144333	Screw hex head 1/4-20 × .75 drilled hd zinc pltd	\$6.00
24	195104	Overlay, descriptive 4260M	\$31.00
25	194709	Overlay switch 4260M	\$32.00
26	139472	Cable assembly bulkhead power 4260B/4260M	\$49.00
27	144929	Spacer mini dual locking .1 hole × 6 mm long	\$7.00
28	201823	Antenna 2.4 GHz patch cable	\$40.00
29	139450	RF cable assembly mmcx str jack - U.FL 175 mm	\$26.00
30	197592	Light shield blackout .235 × 1.25 peel & stick	\$5.00
31	143352	Conn closure cap IP68 male	\$4.00

Note: Items 14,16 and 26 add new item for the assembly

REPLACEMENT PARTS

MSI-4260M Marine

Front Assembly



REPLACEMENT PARTS

MSI-4260M Marine

Battery Casting Assembly



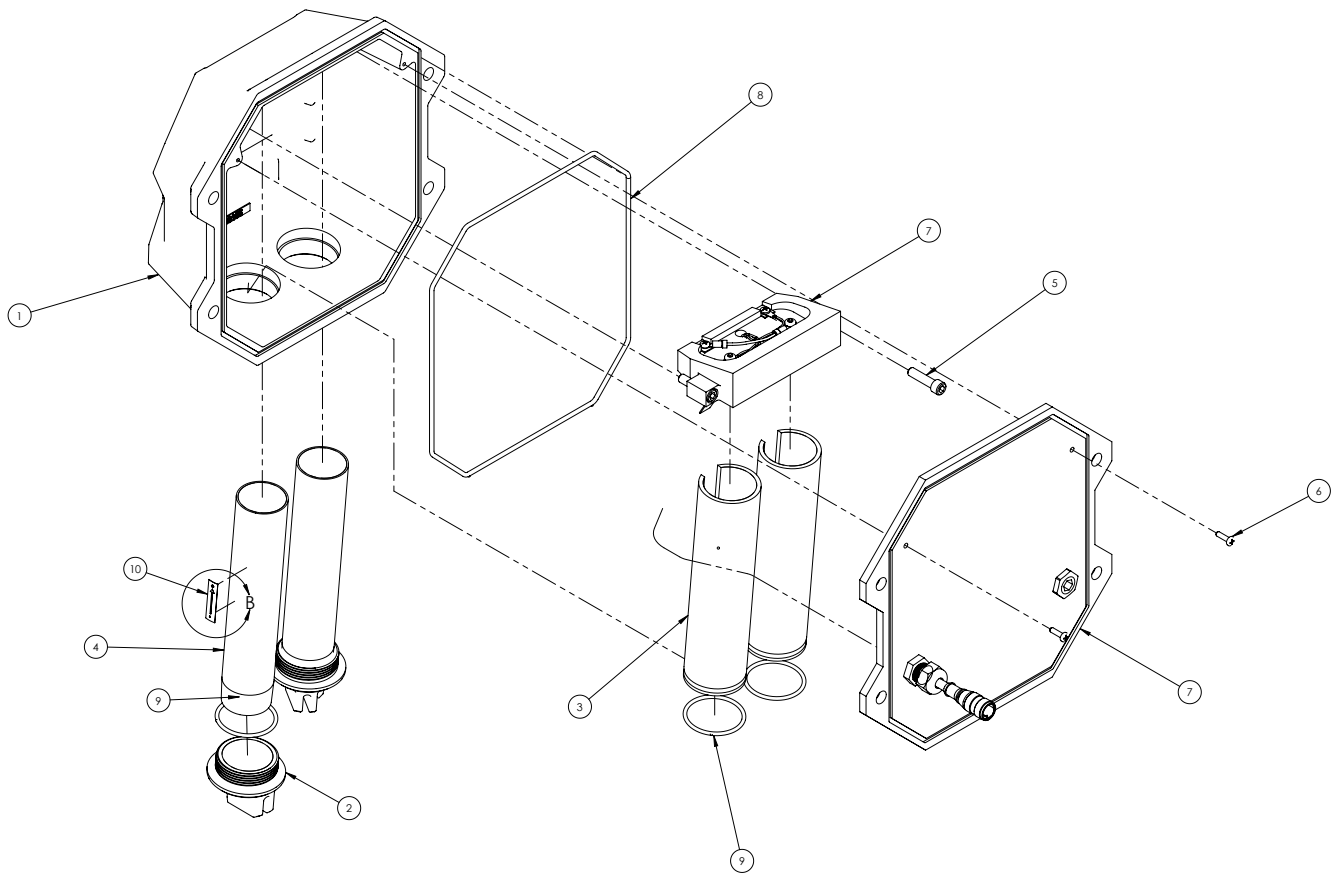
Part Number/Price

Item #	Part #	Description	Price
1	196155	Rear casting d-cell battery 4260M	\$325.00
2	147901	Battery cap paw+ d-cell tube 4260M	\$17.00
3	196308	Guide tube d-cell battery 4260M	\$120.00
4	196313	Weldment d-cell battery tube	\$155.00
5	81405	Screw socket head 1/4-20 × 1 stainless steel	\$1.25
6	146605	Screw pan head 6-32 × 1/2 stainless steel	\$4.00
7	196500	Battery terminal carrier assembly	\$500.00
8	149724	O-ring assembly front casting paw/trans-weigh 4260M	\$14.00
9	196502	O-ring 1-9/16 id × .103	\$4.00
10	141676	Polarity label	\$4.00

REPLACEMENT PARTS

MSI-4260M Marine

Battery Casting Assembly



REPLACEMENT PARTS

MSI-4260M Marine

Midsection Assembly



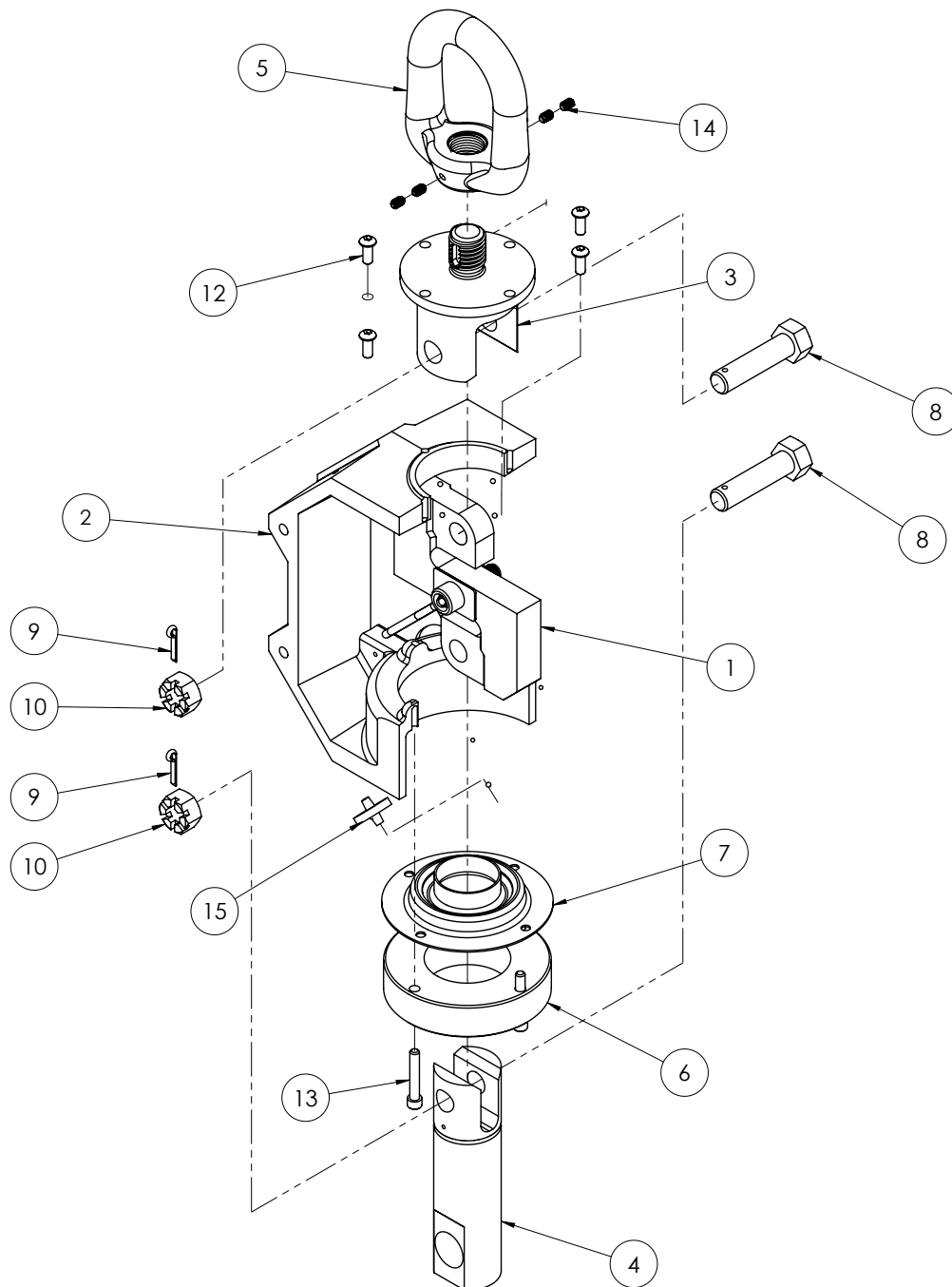
Part Number/Price

Item #	Part #	Description	Price
1	138663	Load cell assembly 5 K S-beam 4260B/4260M	\$1,750.00
2	149175	Casting mid section 5/10 K S-beam 6260CS, 4260M	\$375.00
3	203378	Upper link S-beam 5/10 K	\$545.00
4	205230	Lower link 5/10 K S-beam 4260M	\$220.00
5	148225	Eye nut 5/10 K	\$280.00
6	204508	Collar 5/10 K shackle	\$250.00
7	149165	Seal lower link EDPM	\$62.00
8	149217	Bolt clevis pin hex head 5/8 × 2.75 GRIP. 5 K/10 K capacity	\$34.00
9	15238	Pin cotter 1/8 × 1 stainless steel	\$1.25
10	142832	Nut hex slotted 5/8-11	\$4.00
11	144878	Washer flat 5/8 × 1.312	\$4.00
12	72031	Screw button head 1/4-20 × 5/8 stainless steel socket hd	\$1.25
13	117599	Screw socket head 1/4-20 × 1-1/2 stainless steel	\$4.00
14	128799	Screw set 1/4-20 × 3/8 stainless steel	\$4.00
15	146322	Filter millipore	\$10.00

REPLACEMENT PARTS

MSI-4260M Marine

Midsection Assembly



REPLACEMENT PARTS

MSI-9600HT

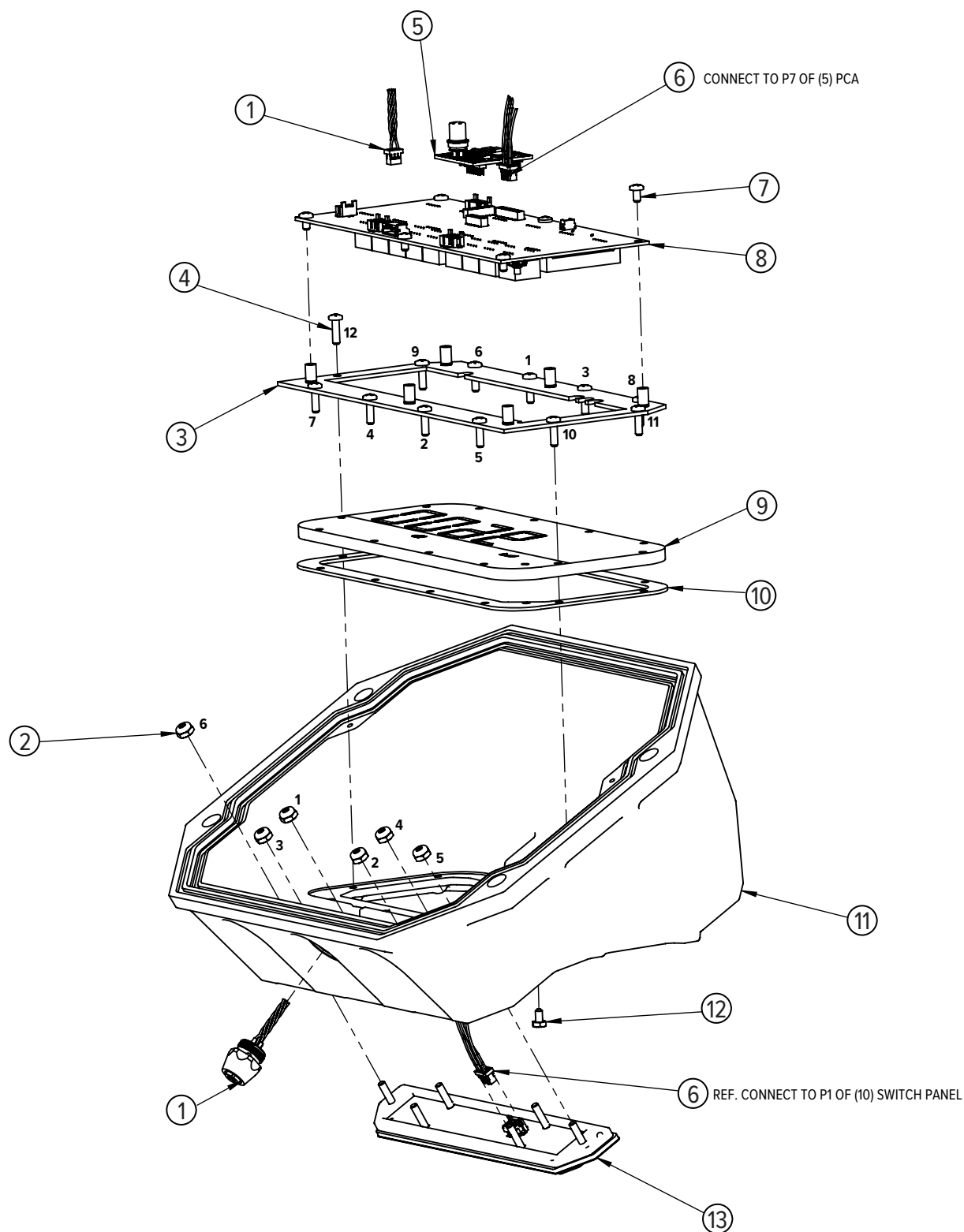
Front Casting Assembly



Part Number/Price

Item #	Part #	Description	Price
1	139449	Cable assembly, communication serial data RS-232	\$56.00
2	128445	Nut, hex 6-32 nyloc stainless steel	\$4.00
3	213965	Bracket, display PCA	\$100.00
4	216445	Screw, pan head 6-32 × 1/2 Phillips head zinc plated torx drive	\$4.00
5	153429	PCA ScaleCore3 1 channel with Turck insert - controlled	\$310.00
6	214142	Cable assembly switch	\$29.00
7	144537	Screw, lkg pch pan head 6-32 × 1/4 Phillips stainless steel	\$4.00
8	212425	PCA LED display	\$690.00
9	213973	Window, ND gray	\$70.00
10	214763	Gasket, display window	\$7.00
11	213628	Casting front machined	\$440.00
12	142574	Screw hex head stainless steel blk 6-32 1/4	\$5.00
13	213678	Switch panel assembly	\$225.00

REPLACEMENT PARTS



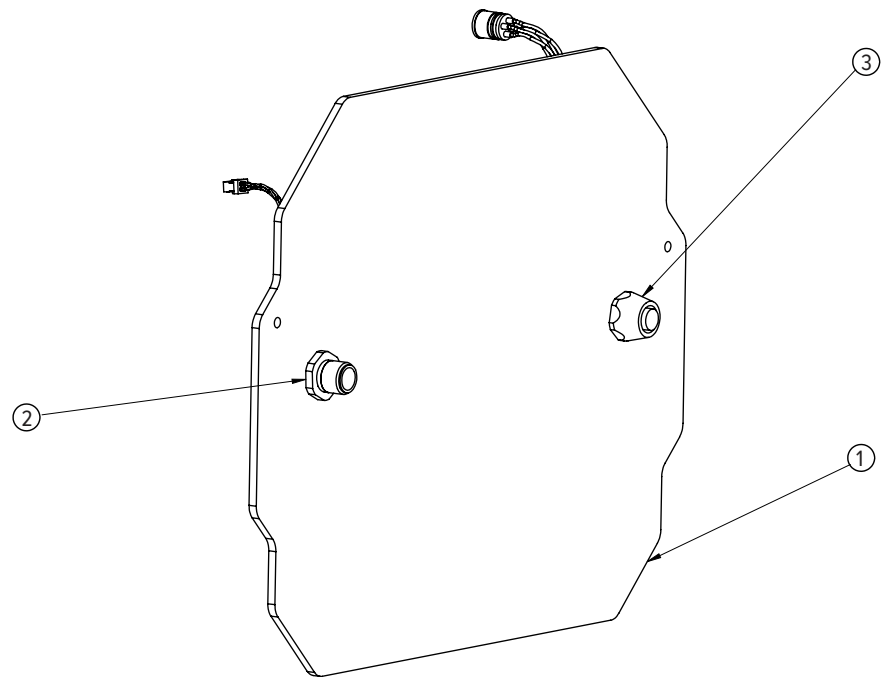
MSI-9600HT

Bulkhead Assembly

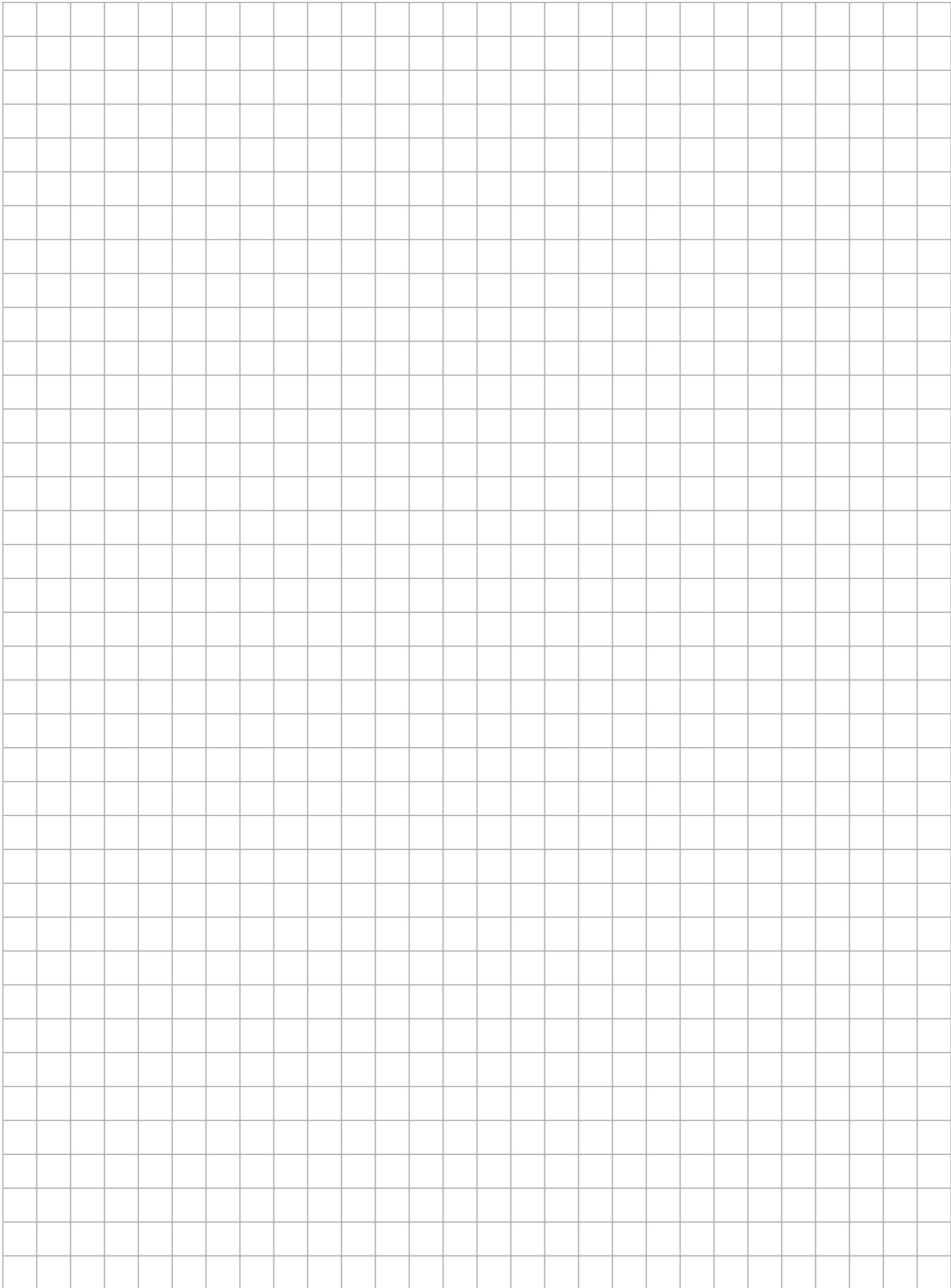


Part Number/Price

Item #	Part #	Description	Price
1	214089	Bulkhead front casting	Consult
2	139472	Cable assembly, bulkhead power 12.0 in	\$49.00
3	139471	Cable assembly, bulkhead load cell 12.0 in	\$90.00



REPLACEMENT PARTS



MSI-9600HT

Mid-section Assembly 10,000 lb



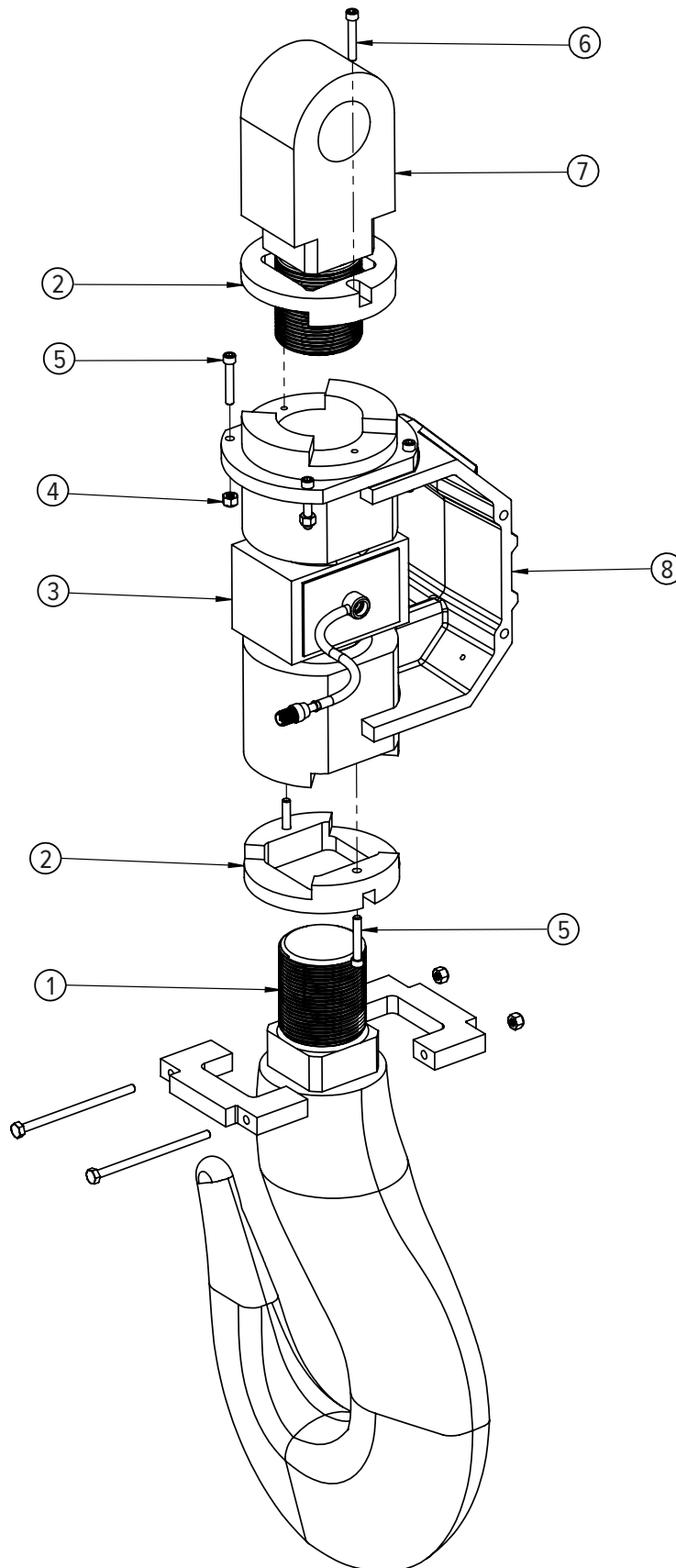
Part Number/Price

Item #	Part #	Description	Price
1	138220	Hook, machined, torque	\$1,600.00
2	148994	Collar, torque resistant	\$510.00
3	138147	Load cell assembly, torque	\$3,325.00
4	109955	Screw, socket head, 1/4-20 x 3/4, stainless steel	\$4.00
5	148995	Lug, upper, torque	\$1,525.00
6	148964	Casting, mid-section, machined	\$665.00
Not Shown	143233	Latch, safety kit	\$45.00

REPLACEMENT PARTS

MSI-9600HT

Mid-section Assembly 10,000 lb



REPLACEMENT PARTS

MSI-9600HT

Mid-section Assembly 30,000 lb



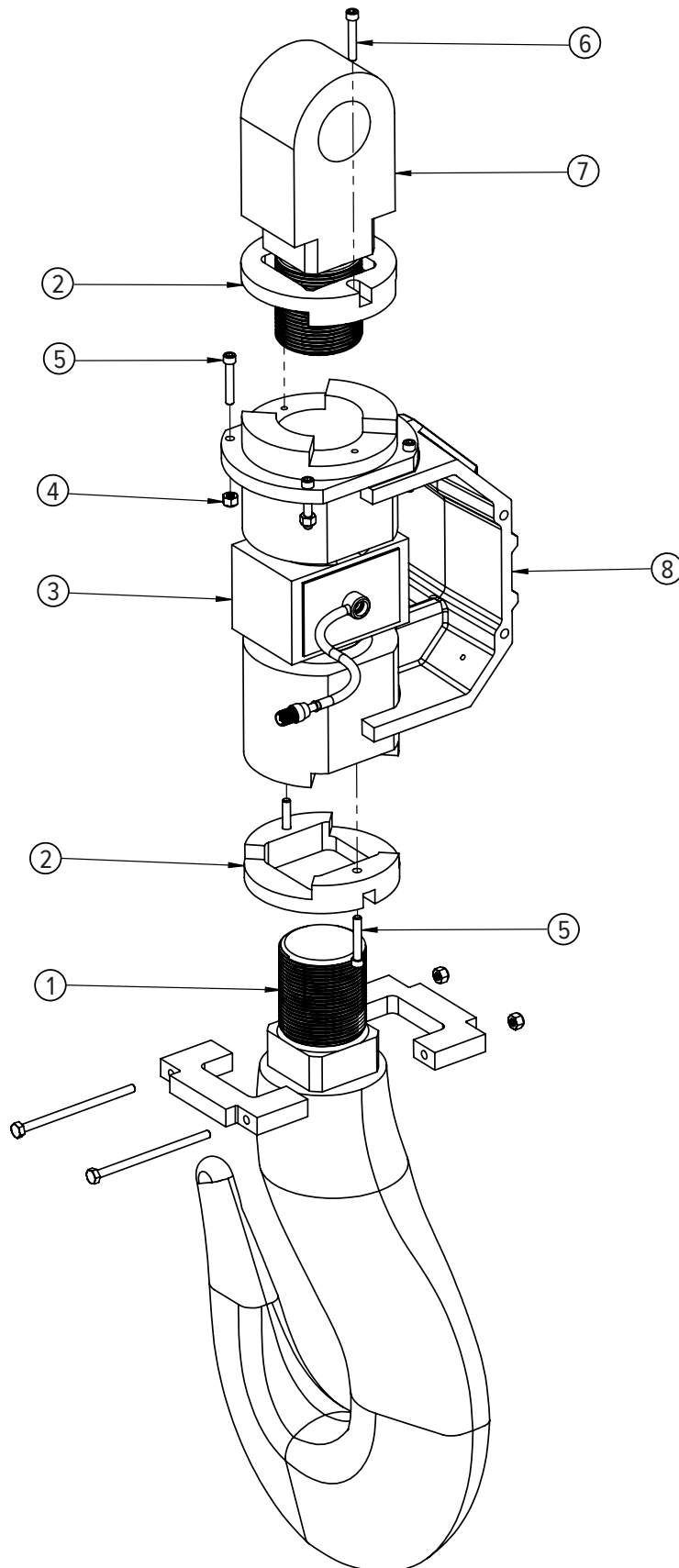
Part Number/Price

Item #	Part #	Description	Price
1	137813	Hook, machined, torque	\$2,525.00
2	148865	Collar, torque resistant	\$620.00
3	138145	Load cell assembly, torque	\$4,550.00
4	109955	Screw, socket head, 1/4-20 x 3/4, stainless steel	\$4.00
5	149037	Lug, 30 K torque resistant	\$2,000.00
6	148963	Casting, mid-section, machined	\$665.00
Not Shown	143235	Latch, safety kit	\$115.00

REPLACEMENT PARTS

MSI-9600HT

Mid-section Assembly 30,000 lb



REPLACEMENT PARTS

MSI-9600HT

Mid-section Assembly 70,000 lb



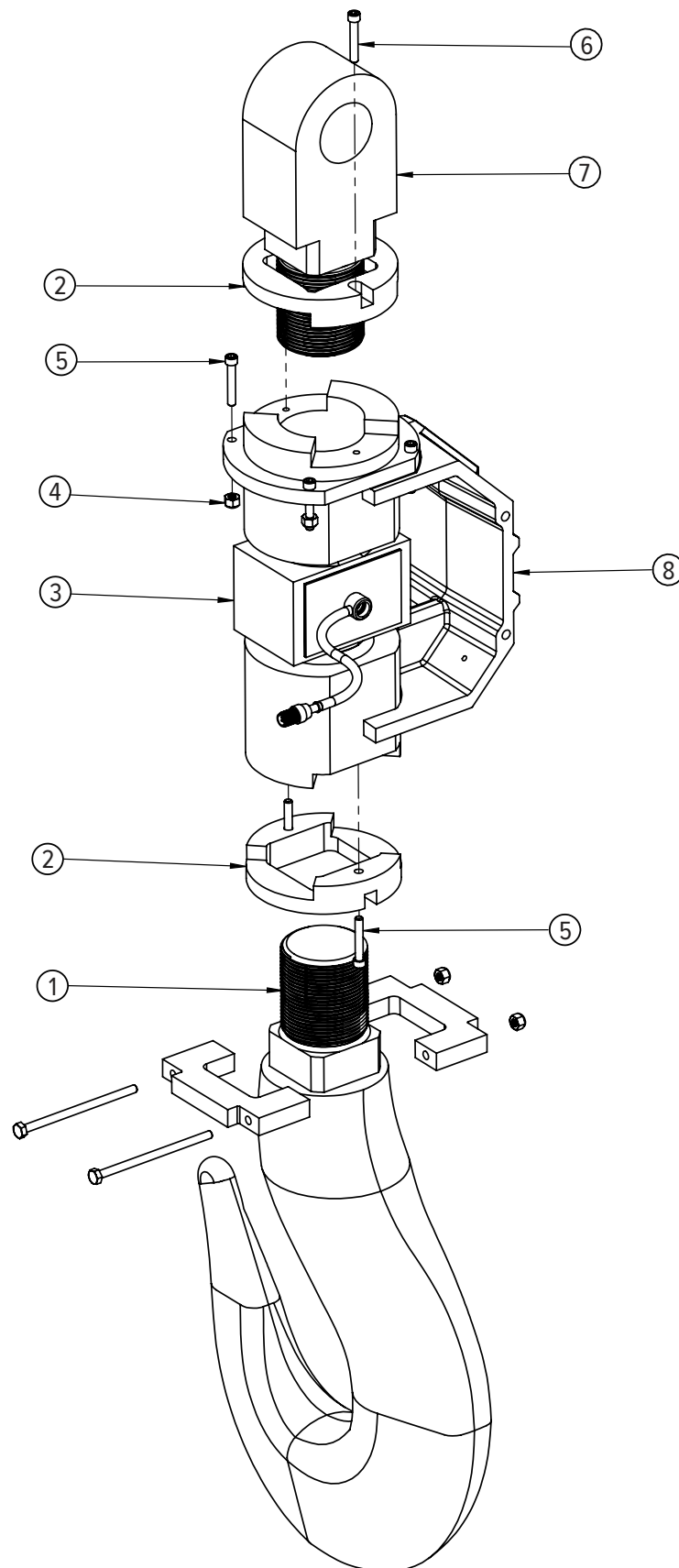
Part Number/Price

Item #	Part #	Description	Price
1	138142	Hook, machined, torque	Contact Factory
2	148960	Collar, torque resistant	\$675.00
3	138146	Load cell assembly, torque	\$4,900.00
4	146631	Nut, hex, 1/4-20 nyloc, stainless steel	\$4.00
5	117599	Screw, socket head, 1/4-20 × 1-1/2	\$4.00
6	109955	Screw, socket head, 1/4-20 × 3/4, stainless steel	\$4.00
7	149018	Lug, 70 K torque resistant	\$1,950.00
8	138149	Casting, mid-section, machined	\$735.00
Not Shown	142180	Latch, safety kit	\$220.00

REPLACEMENT PARTS

MSI-9600HT

Mid-section Assembly 70,000lb



REPLACEMENT PARTS

MSI-9600HT

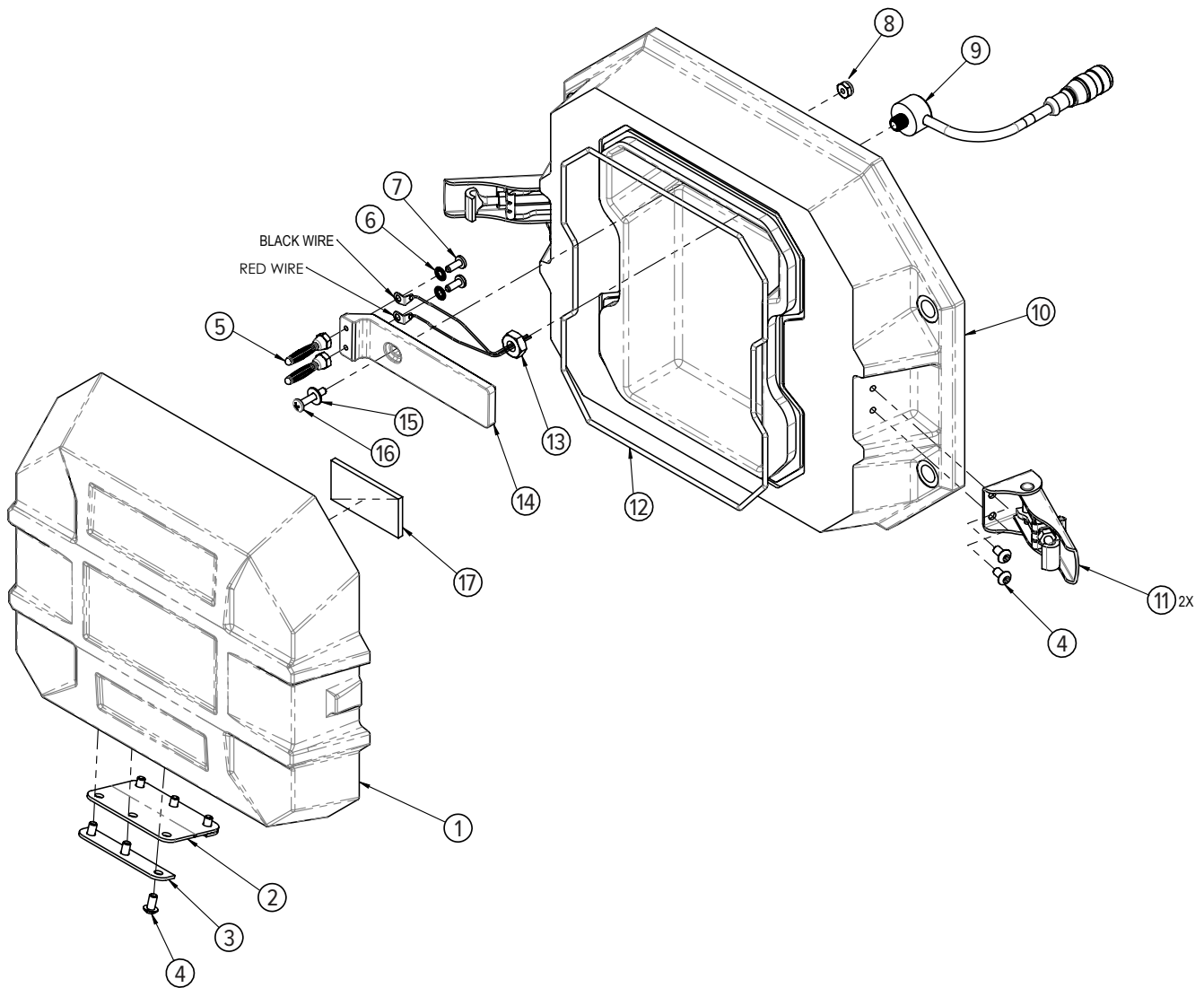
Back Assembly



Part Number/Price

Item #	Part #	Description	Price
1	193557	Casting, rear cover, 12 V, machined	\$305.00
2	149719	Fastener battery door	\$11.00
3	149718	Plate aluminum battery	\$14.00
4	213050	Screw, button head 8-32 x 5/16 stainless steel (T15) torx drive	\$4.00
5	147825	Plug banana jack	\$12.00
6	81280	Washer, lock no 6 type A	\$4.00
7	146603	Screw, pan head 6-32 x 3/8 Phillips stainless steel	\$4.00
8	146627	Nut, hex 6-32 nyloc stainless steel	\$4.00
9	214737	Cable assembly power 12 in	Consult
10	204844	Casting rear 12 V SLA machined	\$440.00
11	145934	Latch camloc	\$40.00
12	149723	O-ring assembly batter well casting	\$14.00
13	146661	Nut, hex 5/16-18 jam stainless stell	\$4.00
14	169440	Connector block 12 V battery casting intrinsically safe	Consult
15	55124	Washer, flat #6 cres	\$1.00
16	127036	Screw, 6-32 x 3/4 Phillips pan head 18-8 stainless steel	\$4.25
17	146640	Pad poron 2.0 x 1.0	\$4.00

REPLACEMENT PARTS



MSI-6360

Front Casting Assembly



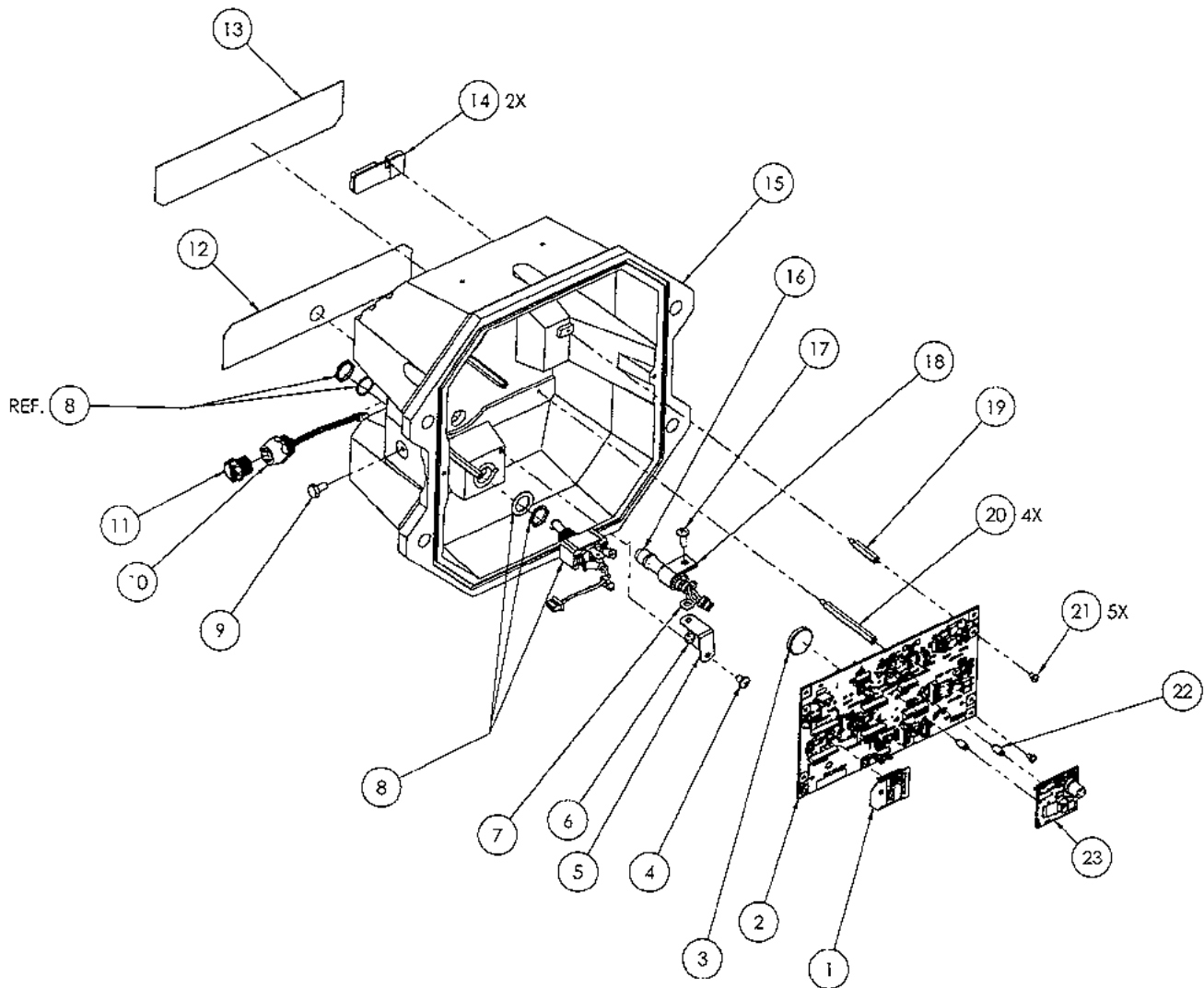
Part Number/Price

Item #	Part #	Description	Price
1	144773	Radio module Xbee-pro	\$155.00
2	212607	PCA 6360 no display	Consult
3	71408	Battery, lithium CR2032	\$6.00
4	146606	Screw pan head 8-32 × 1/4 stainless steel	\$4.00
5	215863	Bracket angle steel #8	\$25.00
6	146629	Nut, hex 8 to 32 nyloc stainless steel	\$4.00
7	146531	Washer flat #8 stainless steel	\$4.00
8	215842	Cable assembly, toggle switch	\$135.00
9	142591	Screw seal dr hh 8 to 32	\$25.00
10	139449	Cable assembly, comm serial	\$56.00
11	143352	Conn closure cap IP68	\$4.00
12	215973	LED/capacity label 6360	\$65.00
13	215948	Label descriptive 6360	\$40.00
14	201823	Antenna 2.4 GHz patch cable	\$40.00
15	215840	Front casting machined	\$365.00
16	215912	Cable assembly, red/green LED	\$202.00
17	146608	Screw pan head 8-32 × 7/16 Phillips	\$4.00
18	143075	Cable clamp .375 diameter	\$4.00
19	215938	Standoff 3/16 hex × 0.875	Consult
20	215935	Standoff 3/16 hex × 2.00	\$7.00
21	146593	Screw pan head 4-40 × 3/16 Phillips	\$4.00
22	144929	Spacer miniature dual	\$7.00
23	153429	PCS ScaleCore3 1-channel	\$310.00

REPLACEMENT PARTS

MSI-6360

Front Casting Assembly



REPLACEMENT PARTS

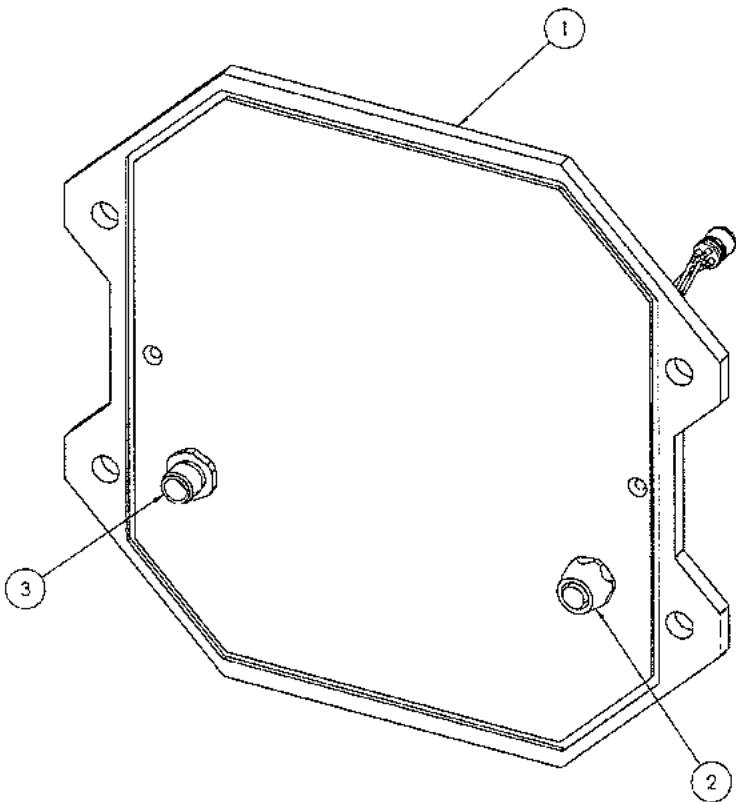
MSI-6360

Bulkhead Assembly

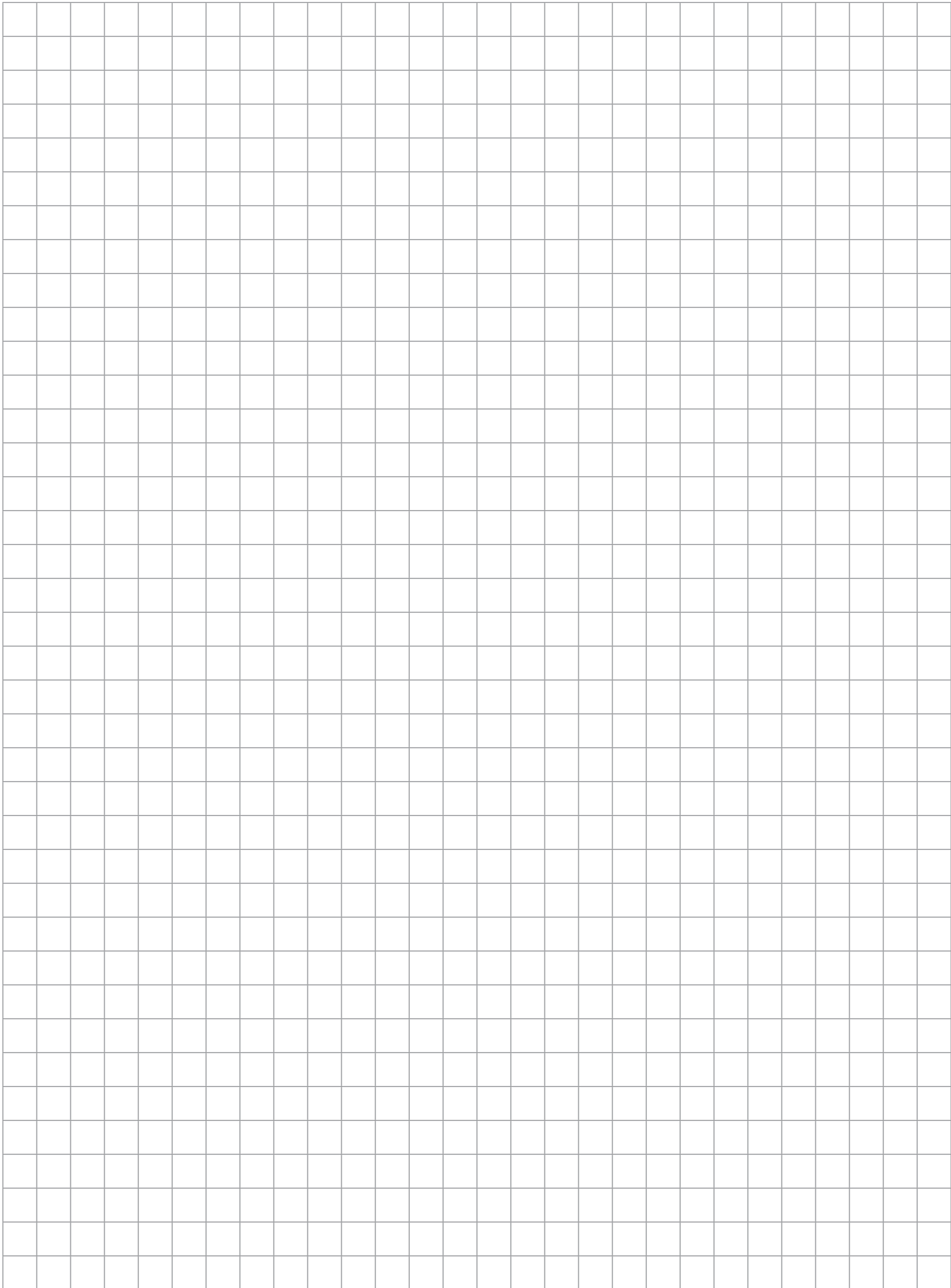


Part Number/Price

Item #	Part #	Description	Price
1	215839	Front bulkhead	\$155.00
2	139471	Cable assembly, bulkhead load	\$90.00
3	139472	Cable assembly, bulkhead	\$49.00



REPLACEMENT PARTS



MSI-6360

Midsection Assembly (500 to 10,000 lb)



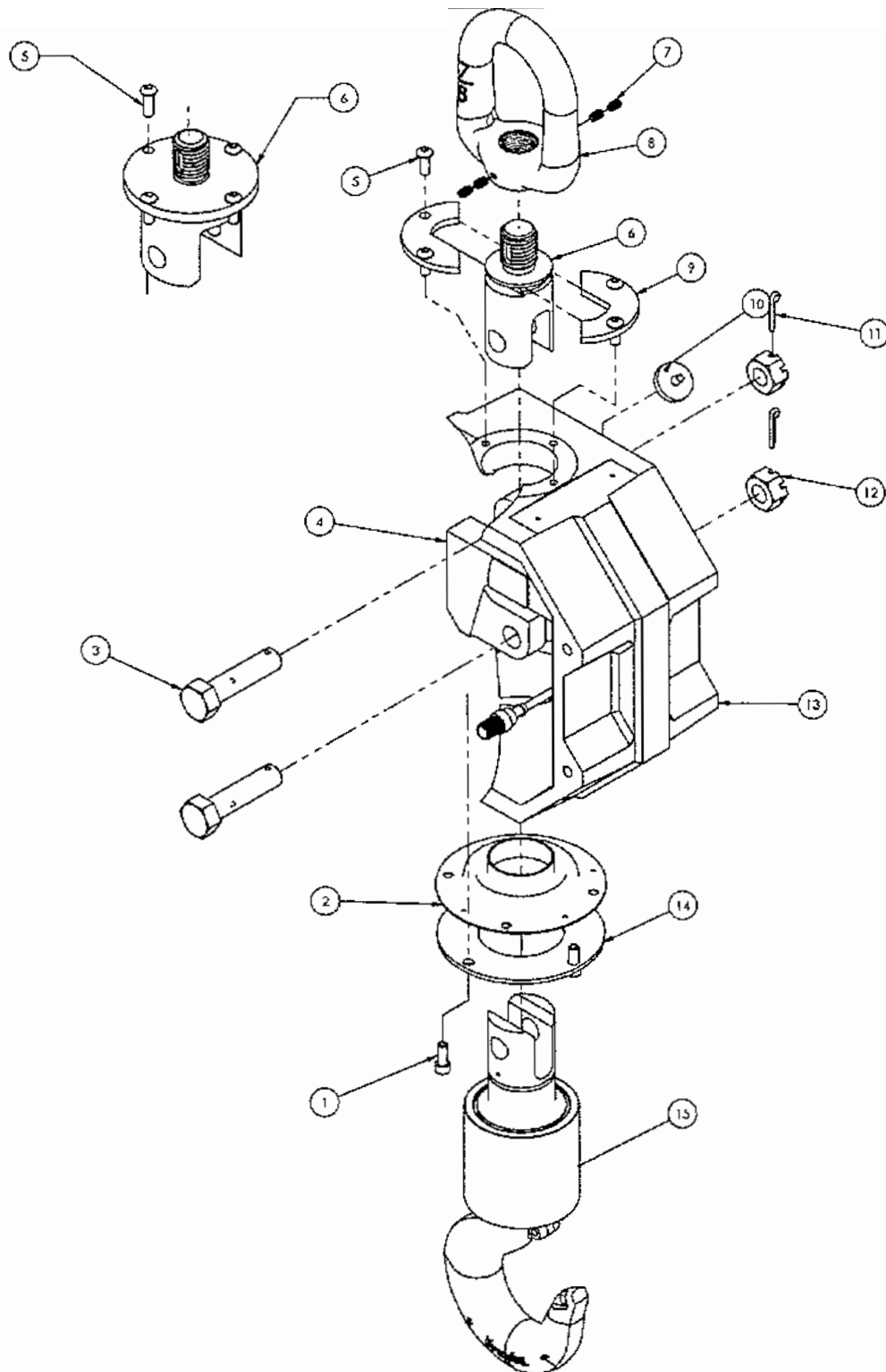
Part Number/Price

Item #	Part #	Description	Price
1	145990	Screw socket head 1/4-20 x 5/8 stainless steel	\$4.00
2	149710	Seal link lower (500 lb to 2K)	\$49.00
2	149165	Seal link lower (5 to 10 K)	\$62.00
3	148457	Bolt clevis hex head 5/8 x 1.75 (500 lb to 2 K)	\$26.00
3	149217	Bolt clevis hex head 5/8 x 1.75 (5 to 10 K)	\$34.00
4	138661	Load cell assembly (500 lb)	\$1,270.00
4	138662	Load cell assembly (1 to 2 K)	\$1,270.00
4	138663	Load cell assembly (5 K)	\$1,750.00
4	138664	Load cell assembly (10 K)	\$1,780.00
5	72031	Screw	\$1.25
6	148271	Upper link (500 lb to 2 K)	\$270.00
6	149126	Upper link (5 to 10 K)	\$455.00
7	128799	Screw, set 1/4-20 x 3/8	\$4.00
8	139795	Eye nut #7 (500 lb to 2 K)	\$220.00
8	148225	Eye nut #7 (5 to 10 K)	\$280.00
9	148274	Collar top half (500 lb to 2 K)	\$40.00
10	146322	Filter millipore	\$10.00
11	15238	Cotter pin	\$1.25
12	142832	Nut hex slotted 5/8-11	\$4.00
13	150519	Casting (500 lb to 2 K)	\$585.00
13	149175	Casting (5 to 10 K)	\$375.00
14	148259	Collar (500 lb to 2 K)	\$49.00
14	149168	Collar (5 to 10 K)	\$65.00
15	135043	Swivel hook assembly (500 lb to 2 K)	\$1,700.00
15	143236	Latch, safety (500 lb to 2 K)	\$28.00
15	134523	Swivel hook assembly (5 to 10 K)	\$1,425.00
15	143233	Latch, safety (5 to 10 K)	\$45.00

REPLACEMENT PARTS

MSI-6360

Midsection Assembly (500 to 10,000 lb)



REPLACEMENT PARTS

MSI-6360

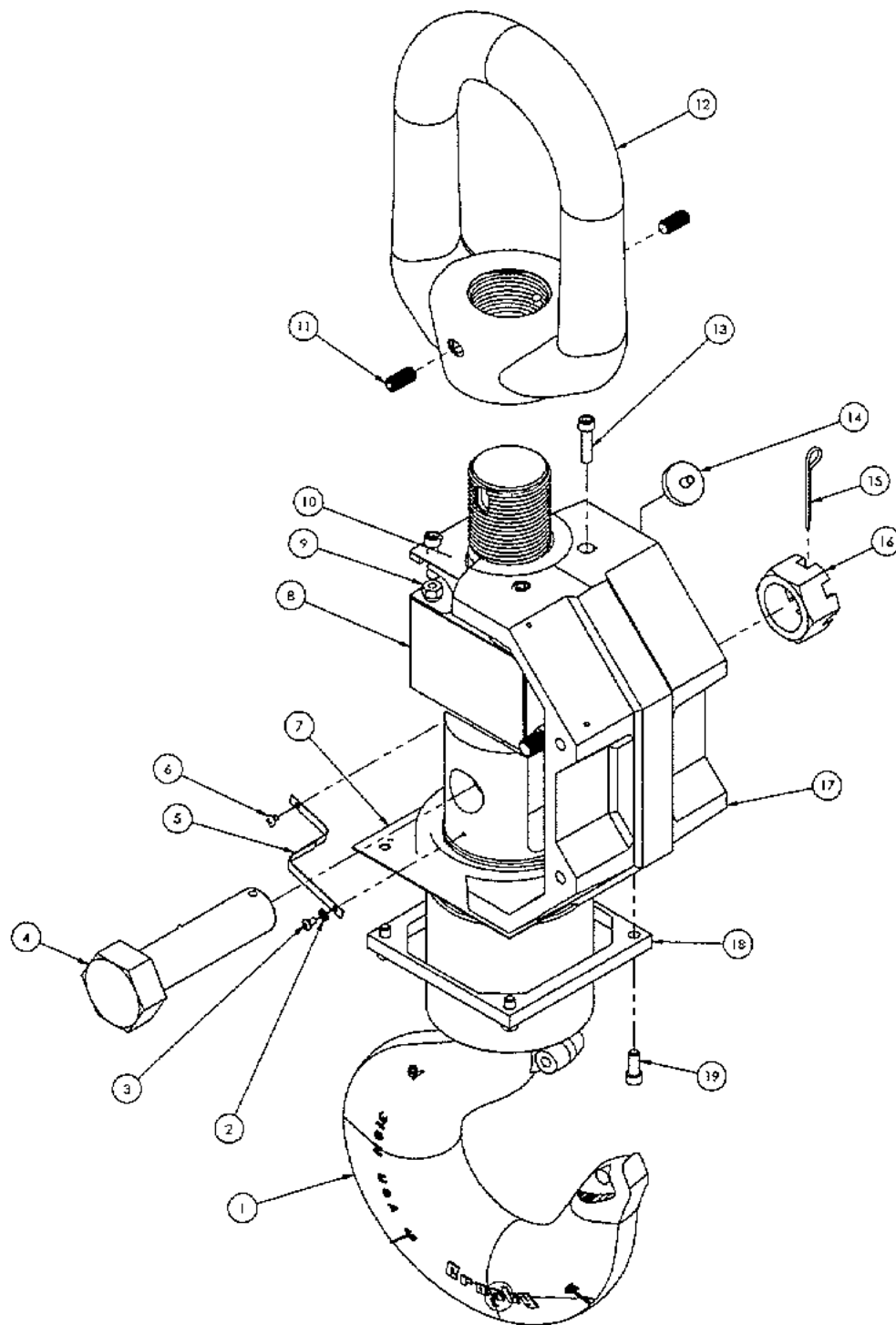
Midsection Assembly (20,000 and 30,000 lb)



Part Number/Price

Item #	Part #	Description	Price
1	134938	Swivel hook assembly (20 K)	\$2,790.00
1	134939	Swivel hook assembly (30 K)	\$3,620.00
1	110661	Latch assembly (20 K)	\$44.00
1	143235	Latch assembly (30 K)	\$115.00
2	81280	Washer, lock no 6 type A	\$4.00
3	146601	Screw pan head 6-32 × 1/4 Phillips	\$4.00
4	148458	Bolt clevis hex head 1.125-7	\$86.00
5	139843	Ground strap cable	\$14.00
6	146101	Screw pan head 6-32 × 3/16 type	\$4.00
7	149957	Boot lower (20 to 70 K)	\$86.00
8	137763	Load cell assembly (20/30 K)	\$2,240.00
9	146631	Nut hex 1/4-20 nyloc stainless steel	\$4.00
10	149976	Gasket upper (20/30 K)	\$6.00
11	146081	Screw set 3/8-24 × 3/4	\$3.00
12	148110	Eye nut (20/30 K) galvanized	\$635.00
13	81405	Screw, socket head 1/4-20	\$1.25
14	146322	Filter millipore	\$10.00
15	142186	Cotter pin 3/16 × 2 stainless steel	\$4.00
16	142833	Nut hex slotted 1.125 - 7	\$12.00
17	150523	Mid-section machined	\$510.00
18	149958	Collar bottom (20 to 50 K)	\$140.00
19	145990	Screw socket head 1/4-20 x 5/8 stainless steel	\$4.00

REPLACEMENT PARTS



MSI-6360

Midsection Assembly (50,000 and 70,000 lb)



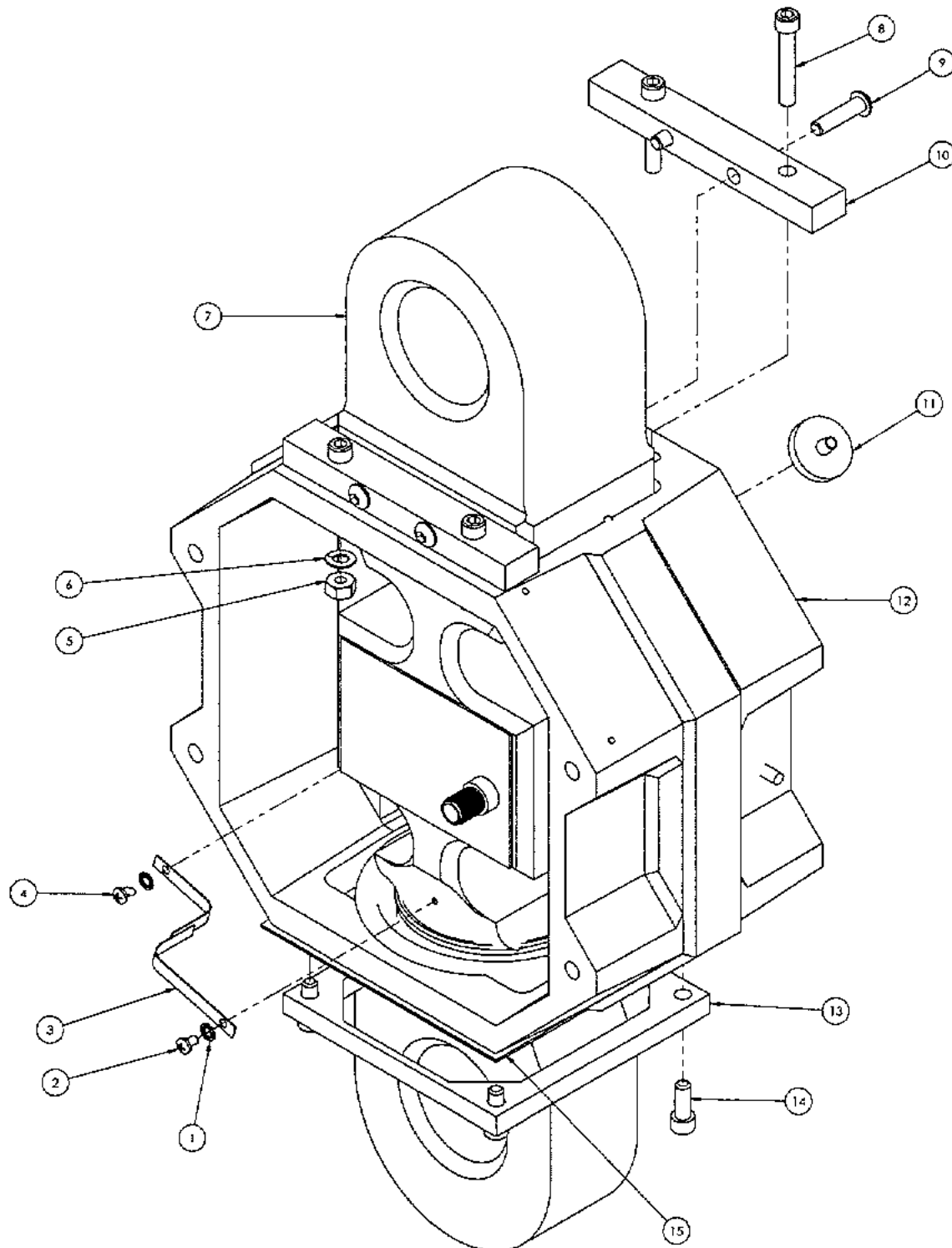
Part Number/Price

Item #	Part #	Description	Price
1	81280	Washer, lock no 6 type A	\$4.00
2	146601	Screw pan head 6-32 × 1/4 Phillips	\$4.00
3	139843	Ground strap cable	\$14.00
4	146101	Screw pan head 6-32 × 3/16 type	\$4.00
5	14642	Nut, 1/4-20NC hex stainless steel	\$4.00
6	15148	Washer, lock 1/4 regular	\$1.25
7	137764	Load cell assembly 50/70 K	\$5,330.00
8	117599	Screw, cap 1/4-20NC × 1-1/2	\$4.00
9	145982	Screw button head 1/4-20 × 1 stainless steel	\$4.00
10	148213	Collar top 50/100 K	\$97.00
11	146322	Filter millipore	\$10.00
12	150525	Mid-section machined	\$515.00
13	149958	Collar bottom 20-50 K	\$140.00
14	145990	Screw slotted head 1/4-20 × 5/8 stainless steel	\$4.00
15	149957	Boot lower 20-70 K	\$86.00
Additional Parts Available			
	135035	50 K hook, swivel	\$8,390.00
	142179	50 K latch	\$170.00
	135036	70 K hook	\$11,750.00
	142180	70 K latch	\$220.00
	151356	50 K shackle 25 ton	Consult
	146335	70 K shackle 40 ton	Consult

REPLACEMENT PARTS

MSI-6360

Midsection Assembly (50,000 and 70,000 lb)



REPLACEMENT PARTS

MSI-6360

Rear Battery Casting Assembly



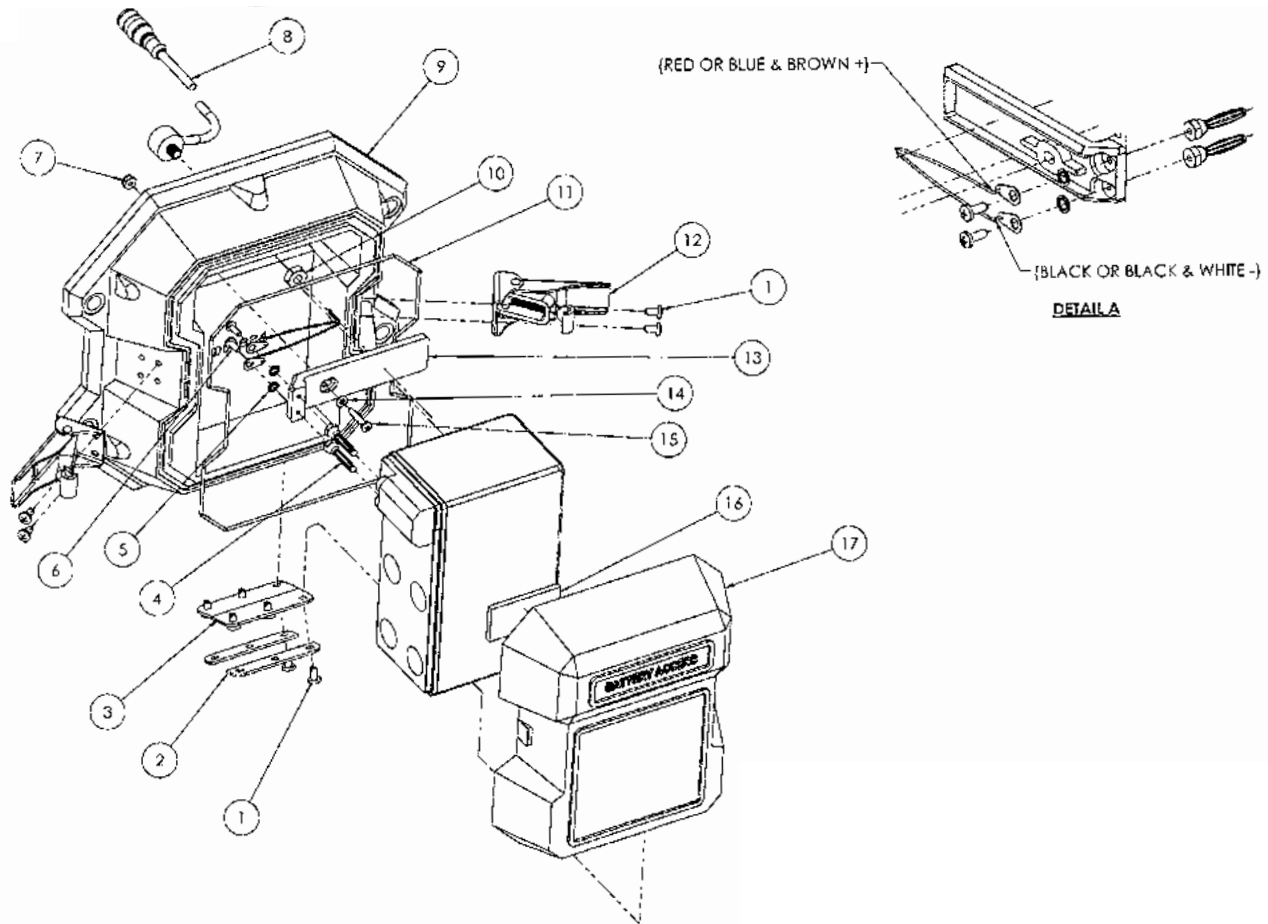
Part Number/Price

Item #	Part #	Description	Price
1	146108	Screw pan head 8-32 × 3/8 type	\$4.00
2	149718	Plate aluminum battery	\$14.00
3	149719	Fastener battery door	\$11.00
4	147825	Plug banana jack	\$12.00
5	81280	Washer, lock no 6 type A	\$4.00
6	146603	Screw pan head 6-32 × 3/8 Phillips	\$4.00
7	146627	Nut hex 6-32 nyloc stainless steel	\$4.00
8	133798	Cable assembly, power	\$150.00
9	150517	Battery well machined	\$350.00
10	146661	Nut hex 5/16-18 jam stainless steel	\$4.00
11	149723	O-ring assembly battery	\$14.00
12	145934	Latch camloc	\$40.00
13	150073	Conn block	\$28.00
14	55124	Washer, flat #6	\$1.00
15	127036	Screw, machine 6-32 × 3/4	\$4.25
16	146640	Pad poron 2.0 × 1.0	\$4.00
17	150516	Battery door machined	\$97.00

REPLACEMENT PARTS

MSI-6360

Rear Battery Casting Assembly



REPLACEMENT PARTS

MSI-7300 Dyna-Link

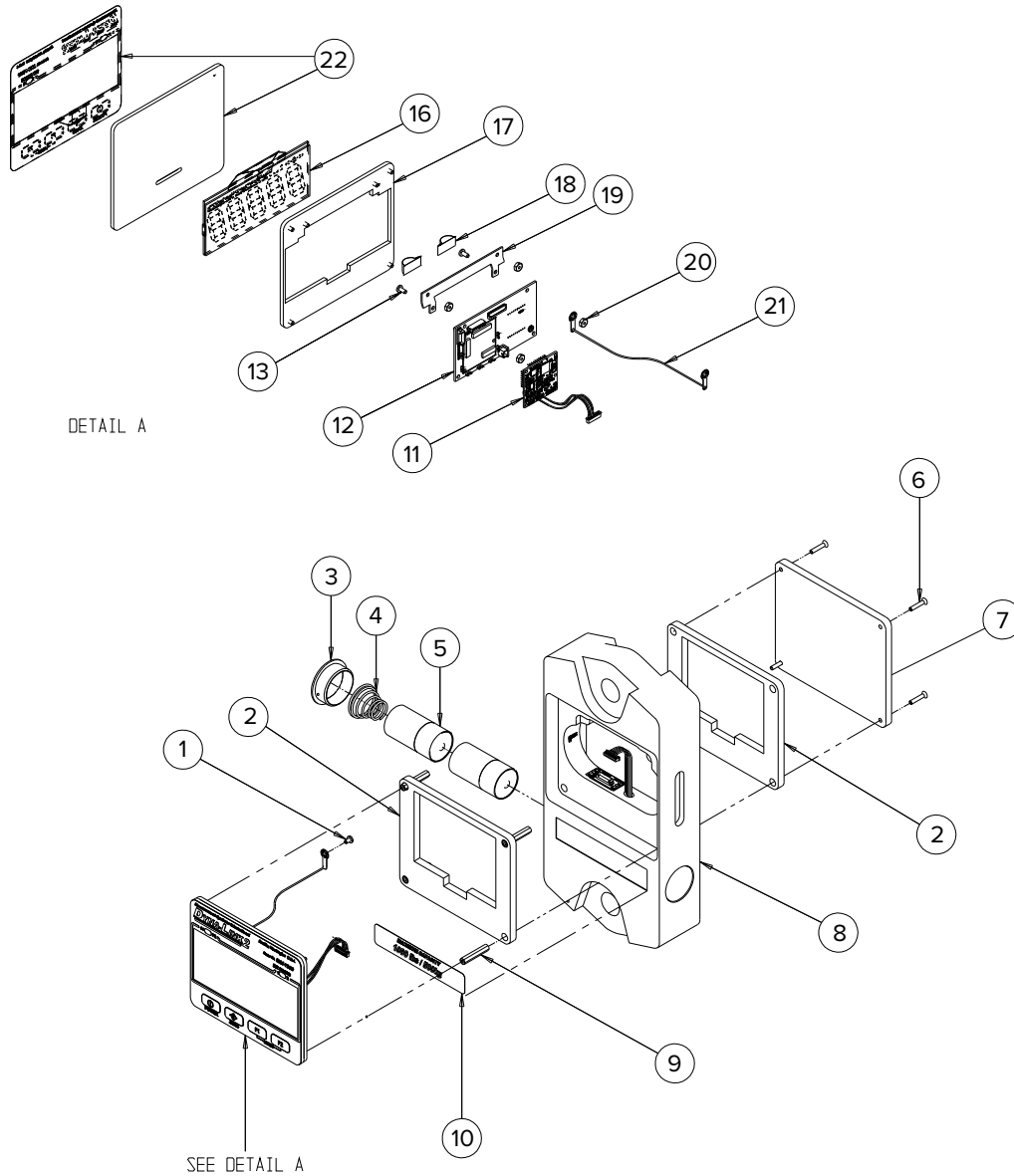
Standard Assembly



Part Number/Price

Item #	Part #	Description	Price
1	146593	Screw, pan head, 4-40 × 3/16, stainless steel	\$4.00
2	149340	Gasket, front	\$34.00
3	144709	Cap, 25, 50 and 100 K capacities	\$51.00
3	144710	Cap, 1, 2, 5 and 10 K capacities	\$34.00
4	144788	Spring, 25, 50 and 100 K	\$7.00
4	144769	Spring, 1, 2, 5 and 10 K	\$6.00
5	42741	Battery "D" cell alkaline	\$5.50
5	74619	Battery, "C" cell alkaline	\$4.00
6	193141	Screw, flat head, 4-40 × 1/2, Phillips, stainless steel	Consult
7	149381	Panel, back	\$63.00
8	139155	Load cell assembly, 1,000 lb	\$1,075.00
8	139156	Load cell assembly, 2,500 lb	\$1,075.00
8	139157	Load cell assembly, 5,000 lb	\$1,075.00
8	139158	Load cell assembly, 10,000 lb	\$1,300.00
8	139159	Load cell assembly, 25,000 lb	\$1,650.00
8	139160	Load cell assembly, 50,000 lb	\$2,225.00
8	139161	Load cell assembly, 100,000 lb	\$3,300.00
9	144789	Spacer, 1.062, 4-40, stainless steel	\$17.00
9	144790	Spacer, 1.312, 4-40, stainless steel	\$17.00
9	144791	Spacer, 1.812, 4-40, stainless steel	\$17.00
9	144792	Spacer, 2.562, 4-40, stainless steel	\$17.00
9	144758	Spacer, 2.00, 4-40, stainless steel	\$17.00
10	148022	Label, capacity, 1,000 lb	\$20.00
10	148029	Label, capacity, 2,500 lb	\$19.00
10	148024	Label, capacity, 5,000 lb	\$20.00
10	148025	Label, capacity, 10,000 lb	\$20.00
10	148026	Label, capacity, 25,000 lb	\$20.00
10	148027	Label, capacity, 50,000 lb	\$20.00
10	134160	Label, capacity, 100,000 lb	Consult
11	153431	PCA, Scalecore assembly	\$295.00
12	149290	PCA, display assembly	\$215.00
13	144536	Screw, pan head, 4-40 × 1/4, Phillips, stainless steel	\$4.00
16	149295	LCD	\$40.00
17	149338	Bezel, assembly	\$81.00
18	144991	Gasket	\$4.00
19	149460	Bracket, LCD	\$28.00
20	146542	Nut, hex 4-40, stainless steel	\$4.00
21	139407	Ground wire	\$6.00
22	225162	Panel, front, label	\$136.00

REPLACEMENT PARTS



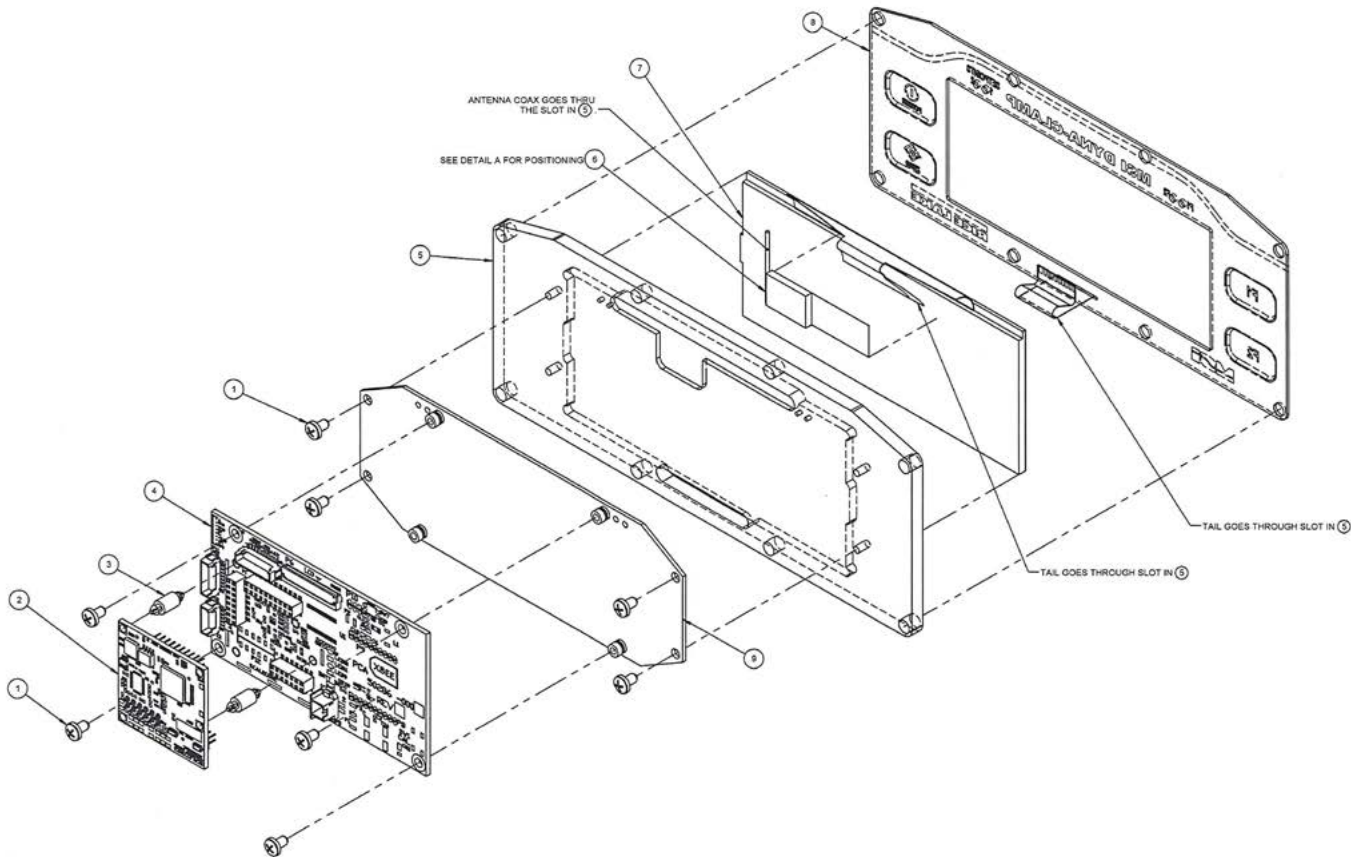
Dyna-Clamp

Display Assembly



Part Number/Price

Item #	Part #	Description	Price
1	142233	Screw, pan head, locking, 4-40 × 3/16, Phillips, stainless steel	\$4.00
2	153431	PCA scalecore 3 4-channel with board to board header (not field installable)	\$295.00
3	144929	Spacer miniature dual locking 6 mm long	\$7.00
4	151918	PCA 6-digit LCD 7300	\$680.00
5	189582	Front plate LCD mount	\$235.00
6	197204	Antenna, 2.4 GHz, 2dBi with u.fl cable, 100 mm	\$15.00
7	186658	LCD module dual line 4.5 × 2.0 in (6 primary display digits) line tension check lcd display	\$36.00
8	191640	Overlay with dome switches	\$155.00
9	191813	Mounting plate electronics	\$46.00

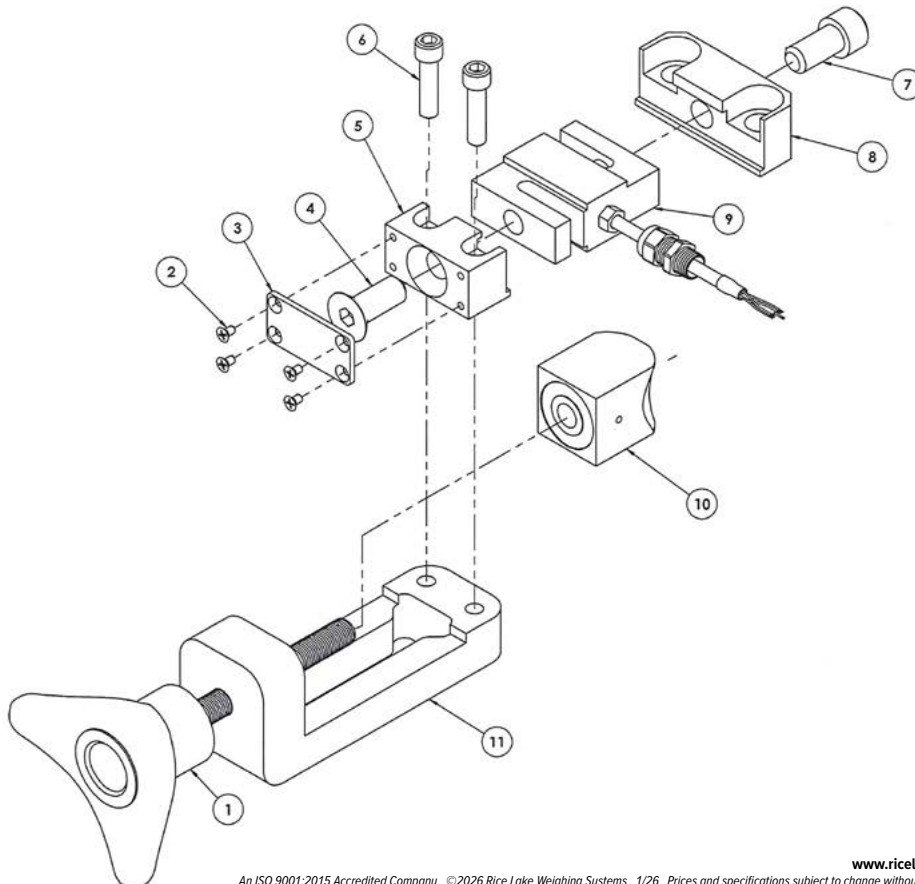


REPLACEMENT PARTS



Part Number/Price

Item #	Part #	Description	Price
1	196441	Handle and drive rod assembly	\$370.00
2	146560	Screw flat head 6-32 x 1/4 Phillips stainless steel	\$4.00
3	192405	Striker plate	\$40.00
4	192718	Screw cap flat head 82 deg 1/2-20 unf x 1.25 lg hex drive alloy steel black oxide	\$4.00
5	191072	Lower load cell mount	\$190.00
6	192747	Screw socket head 5/16-18 uc x 1.25 lg alloy steel black oxide cap screw	\$4.00
7	192746	Screw socket head 1/2-20 unf x 1.00 lg alloy steel black oxide cap screw	\$5.00
8	191071	Upper load cell mount	\$205.00
9	192740	Load cell assembly 500 lb (not field installable)	Consult
10	193410	Drive rod end assembly	\$905.00
11	192416	Drive block	\$615.00



Dyna-Clamp

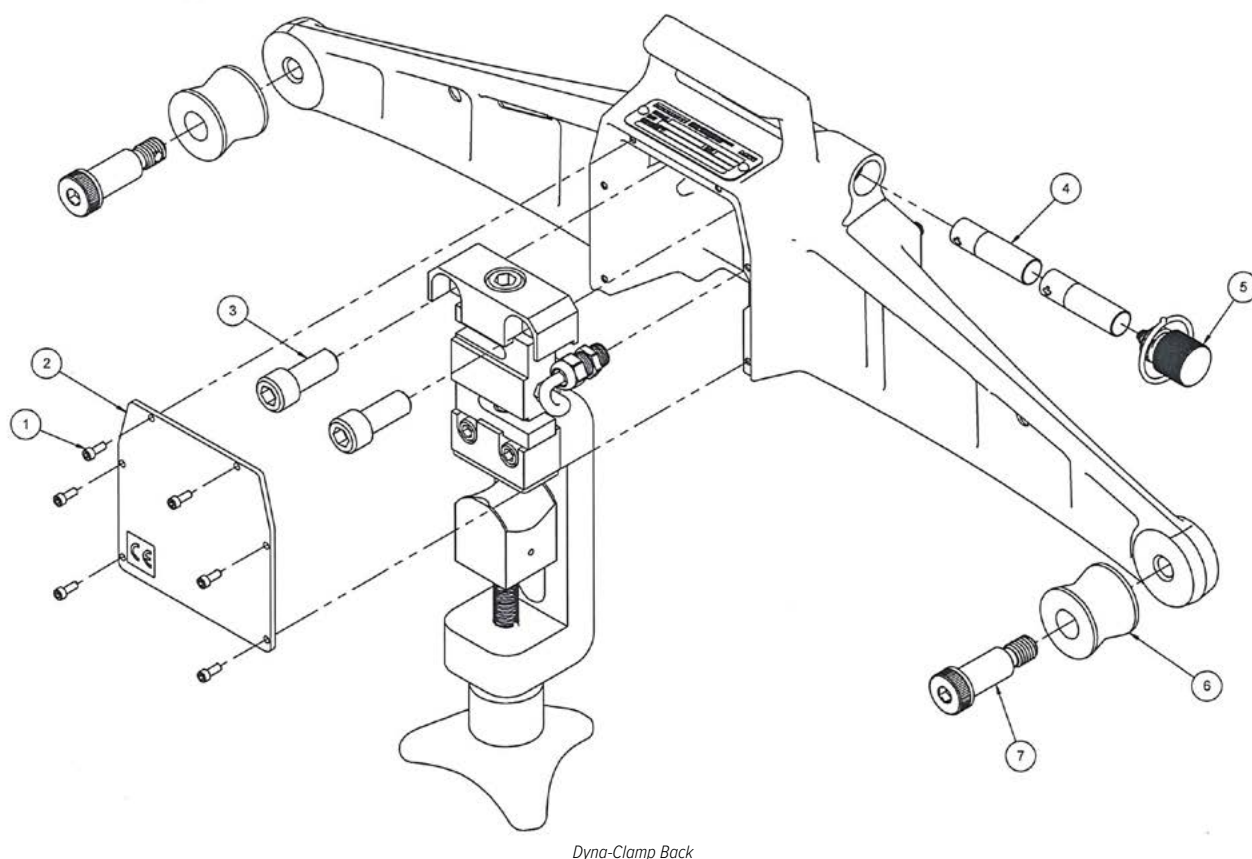
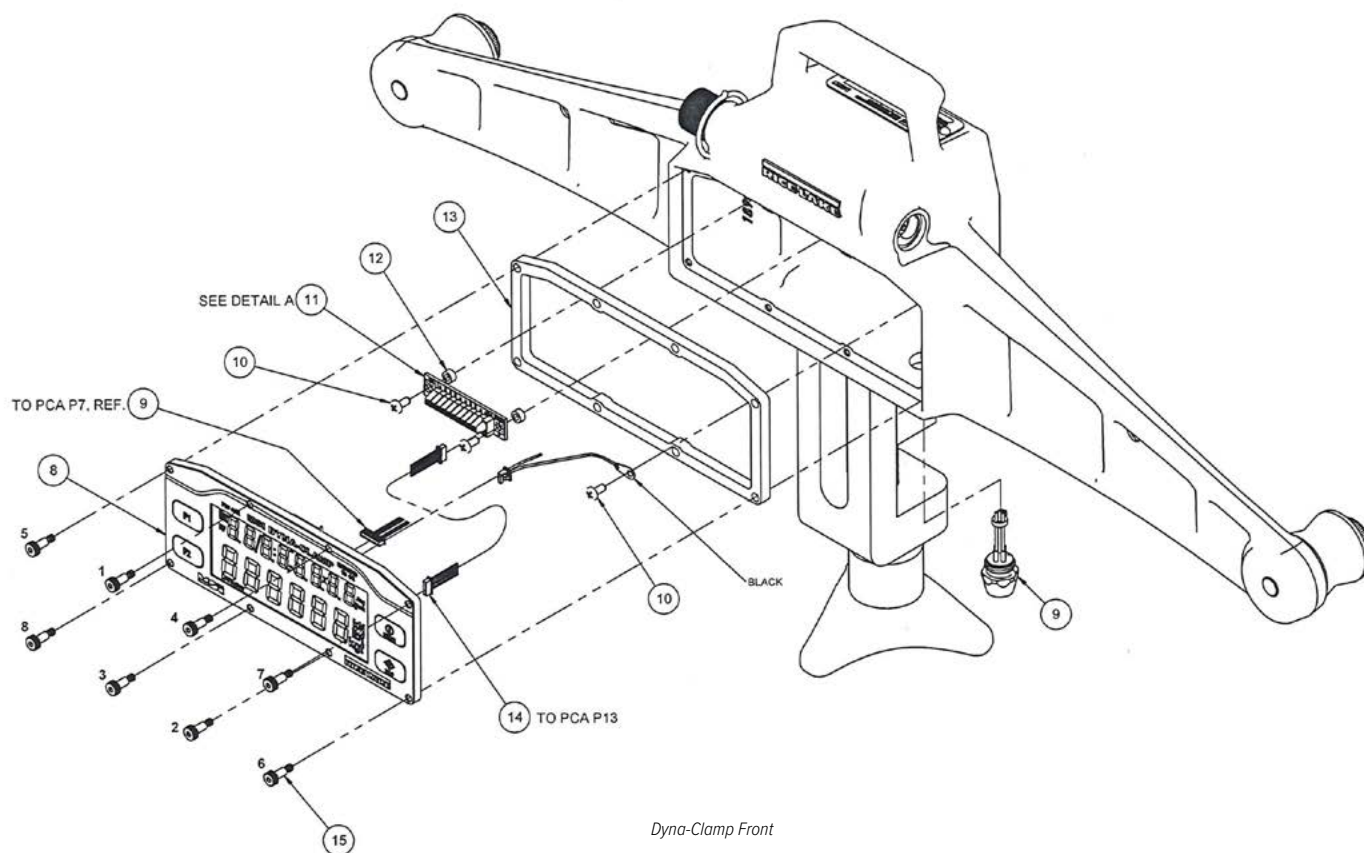
Front and Back Assembly



Part Number/Price

Item #	Part #	Description	Price
1	145988	Screw socket head 6-32 × 3/8 stainless steel	\$6.00
2	192406	Cover plate load train	\$41.00
3	146001	Screw socket head 1/2-20 × 1-1/4 pltd	\$5.00
4	16431	Battery, 1.5V AA alkaline pack of 8	\$4.00
5	191147	Battery cap assembly	\$190.00
6	191155	Cable roller	\$200.00
7	192660	Bolt shoulder 1/2-13 unc shoulder diameter 0.623-621 × 1.25 length with thread locker black oxide	\$23.00
8	189583	Electronics assembly LCD	\$1,075.00
9	192858	Cable assembly serial RS-232	\$73.00
10	142197	Screw, pan head 6-32 × 5/16 long Phillips drive stainless steel with locking patch material applied	\$4.00
11	158437	PCA terminal block 8000HD	\$51.00
12	146226	Spacer .140 in id × .125 in lg #6 clearance #4001	\$4.00
13	191038	Gasket display silicone	\$18.00
14	161622	Cable assembly int load cell term block to display board input	\$19.00
15	194530	Screw shoulder socket head 6-32 5/32 diameter × 5/16 long alloy steel black oxide	\$8.00

REPLACEMENT PARTS



MSI-8000

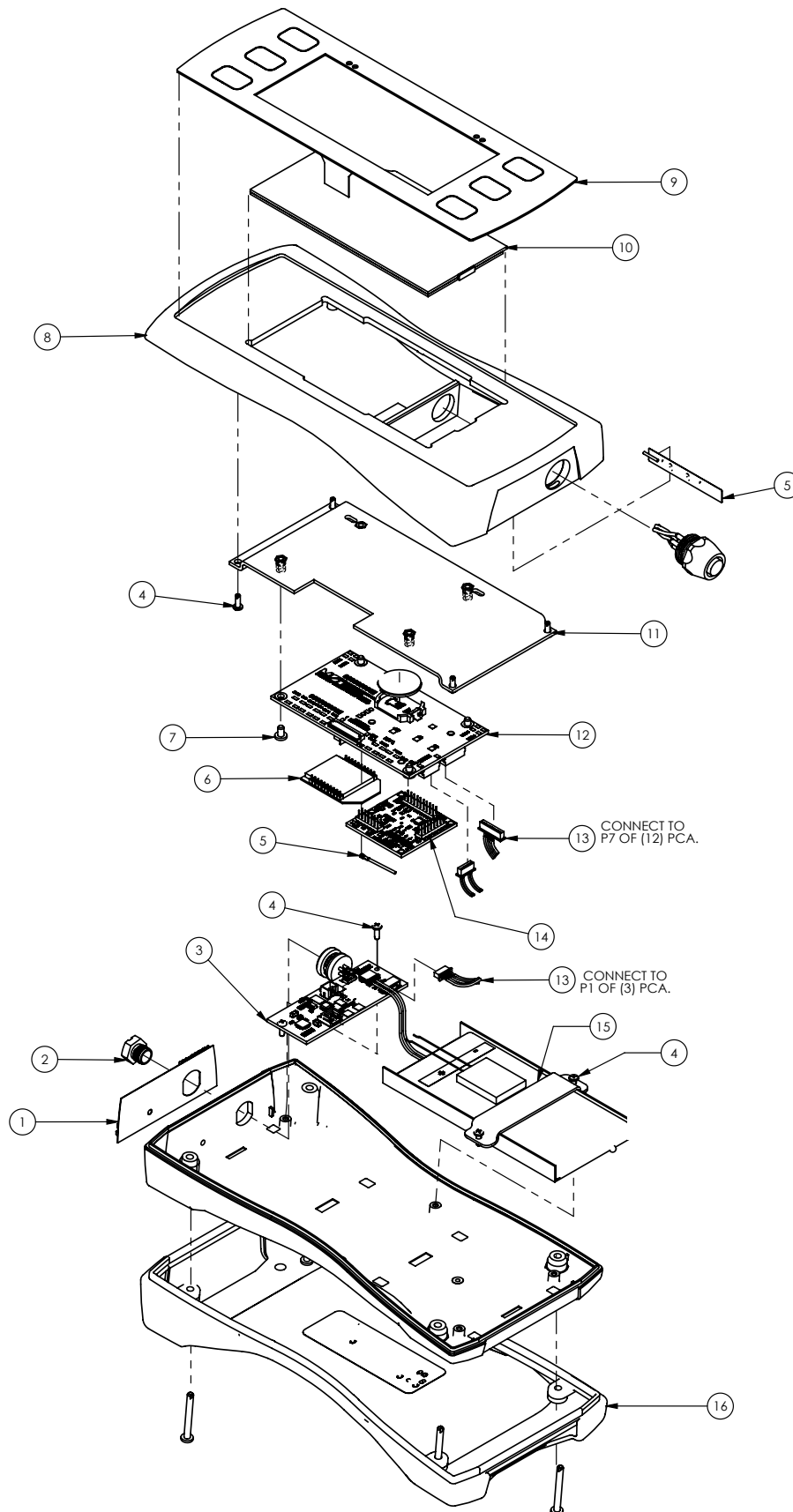
Remote Display



Part Number/Price

Item #	Part #	Description	Price
1	149451	Label charger serial FCC handheld display	\$21.00
2	144908	Conn closure cap IP68 picofast male	\$7.00
3	162339	PCA Li-Po battery charger 5 VDC	\$205.00
4	144935	Screw pan head 2-32 × 1/4 type B Phillips stainless steel	\$4.00
5	145065	Antenna patch 2.4 GHz ADH mount with fl. u coax	\$22.00
6	144773	Radio module Xbee-pro 802.15.4 u.fl connect	\$155.00
7	146593	Screw pan head 4-40 × 3/16 Phillips stainless steel	\$4.00
8	149407	Enclosure machined DynaLink2 REM display	\$180.00
9	149409	Label descriptive switch remote display	\$115.00
10	151575	LCD display 6-digit	\$40.00
11	149408	Mounting plate LCD PCA	\$40.00
12	151918	PCA 6-digit LCD 7300	\$680.00
13	139380	Cable assembly power/comm handheld	\$19.00
14	153428	PCA ScaleCore3 no a/d	\$280.00
15	179169	Bracket assembly	\$37.00
16	144874	Enclosure seal rubber armor blue	\$57.00
-	212312	Battery, Lithium, CR2016	\$4.00

REPLACEMENT PARTS



MSI-8000HD

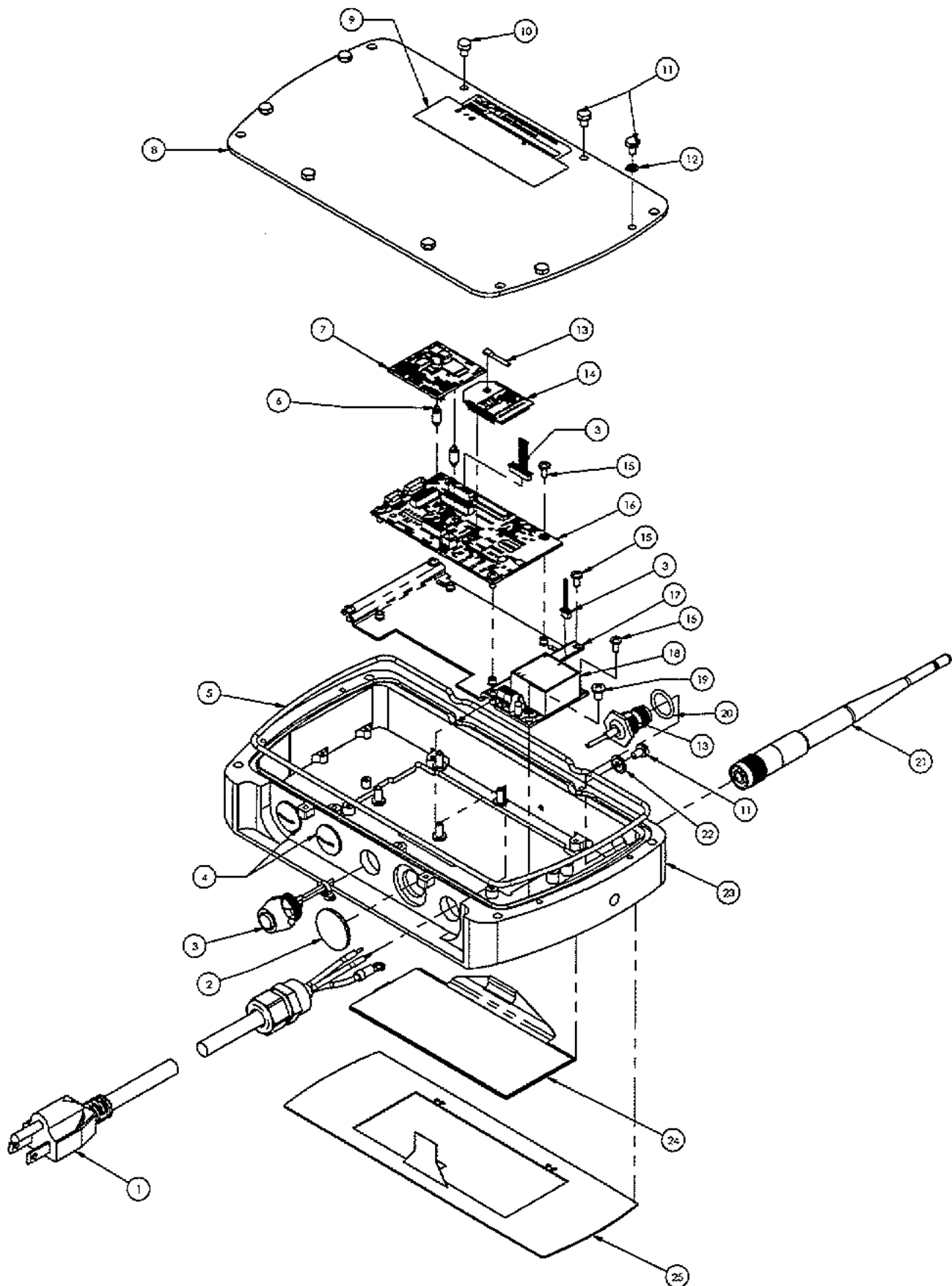
Final Assembly Remote Display



Part Number/Price

Item #	Part #	Description	Price
1	160518	Power cord AC in	\$45.00
2	154863	Plug diameter 0.900 with adhesive	\$19.00
3	161591	Cable assembly serial M12	\$90.00
4	143746	Plug domed PG9 IP65	\$15.00
5	153110	O-ring 7-1/4 x .103	\$6.00
6	144929	Spacer miniature dual	\$7.00
7	153428	PCA ScaleCore3 no a/d	\$280.00
8	152034	Cover fixed mount	\$51.00
9	159855	Overlay TranSend FCC	\$5.75
10	146022	Bolt hex head 6-32 x 1/4 cap stainless steel	\$4.00
11	143271	Screw mach hex head	\$9.00
12	146538	Washer split lock stainless steel #6	\$4.00
13	152051	Cable assembly RF coax	\$34.00
14	144773	Radio module Xbee-pro	\$155.00
15	128088	Screw 4-40 x 1/4 pan head Phillips	\$4.00
16	151918	PCA 6-digit LCD	\$680.00
17	152046	Bracket electronics	\$76.00
18	151599	PCA, AC power supply 5 V 5 W	\$210.00
19	146601	Screw pan head 6-32 x 1/4 Phillips	\$4.00
20	153793	O-ring 1/2 id x .070	\$4.00
21	143283	Antenna 2.4 GHz	\$64.00
22	143272	Washer seal #6 steel	\$4.00
23	151492	Enclosure fixed meter	\$235.00
24	151575	LCD display 6-digit	\$40.00
25	149409	Label descriptive switch	\$115.00
-	212312	Battery, Lithium, CR2016	\$4.00

REPLACEMENT PARTS



REPLACEMENT PARTS

MSI-8004HD

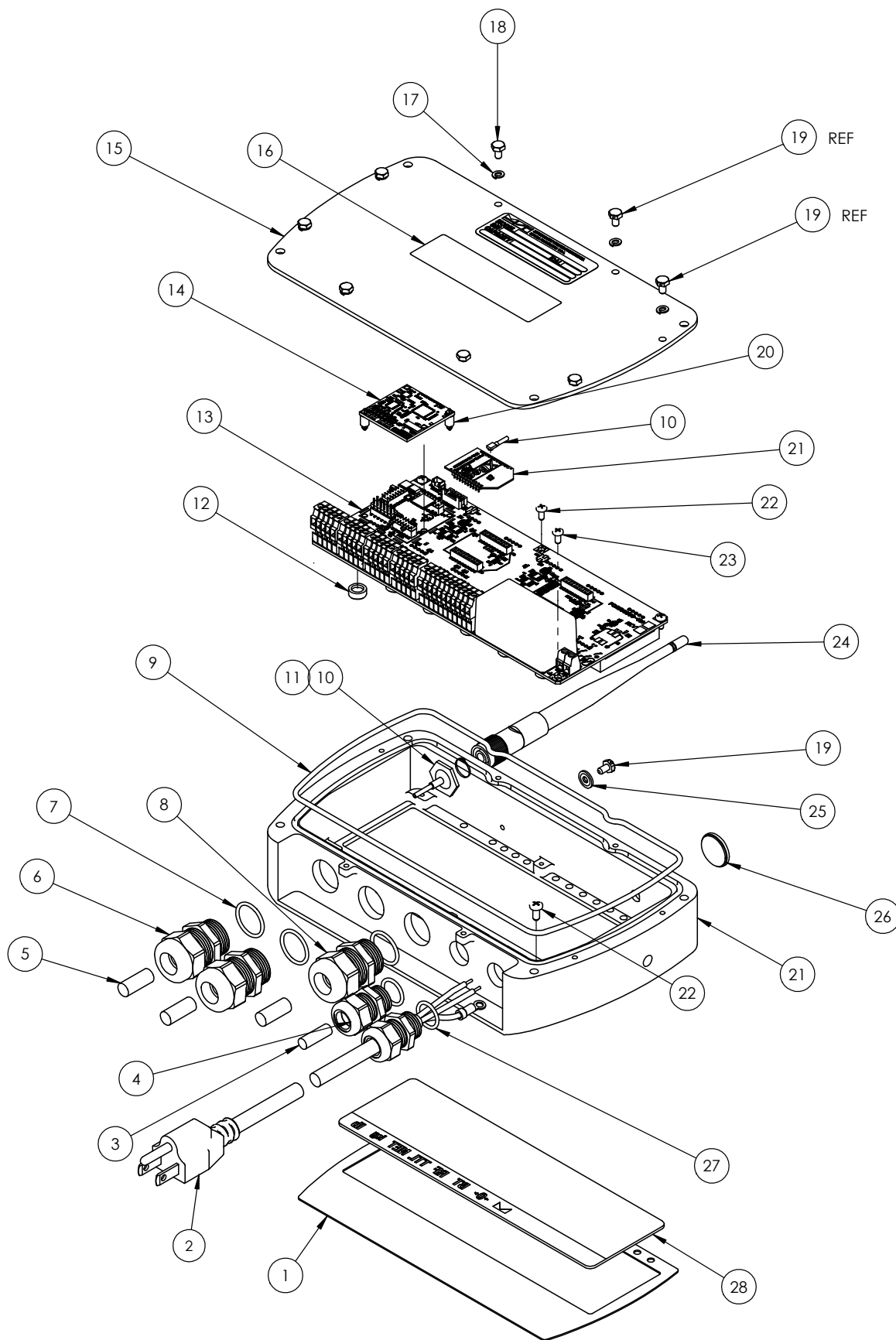
Gen 1 Indicator AC



Part Number/Price

Item #	Part #	Description	Price
1	178180	Overlay, standard	\$44.00
2	160518	Power cord AC in	\$45.00
3	141991	Pin round acetal 0.25 in diameter	\$4.00
4	141593	Conn feed through liquid	\$8.00
5	142554	Pin round acetal 0.312 in diameter	\$4.00
6	177368	Conn, feed through, liquid	\$6.00
7	177366	O-ring, PG13, Buna-N	\$4.00
8	177364	Conn feed through	\$6.00
9	153110	O-ring 7-1/4 × .103	\$6.00
10	152051	Cable assembly RF coax	\$34.00
11	153793	O-ring 1/2 Id × .070	\$4.00
12	177362	Key cap, SMS switches	\$4.00
13	176192	PCA 8004 indicator green/red	\$1,010.00
14	153431	PCA ScaleCore3 4-channel	\$295.00
15	152034	Cover fixed mount 8000	\$51.00
16	159855	Overlay TranSend FCC	\$5.75
17	146538	Washer split lock stainless steel #6	\$4.00
18	146022	Bolt hex head 6-32 × 1/4 cap stainless steel	\$4.00
19	143271	Screw mach hex head	\$9.00
20	144929	Spacer miniature dual	\$7.00
21	144773	Radio module Xbee-pro	\$155.00
22	141991	Pin round acetal, 1/4 diameter	\$4.00
22	142233	Screw, pan head, locking, 4-40 × 3/16, Phillips, stainless steel	\$4.00
23	146543	Screw pan head 4-40 × 1/4 nylon	\$4.00
24	143283	Antenna 2.4 GHz	\$64.00
25	143272	Washer seal #6 steel	\$4.00
26	158438	Plug diameter 0.750 in with adhesive	\$14.00
27	177363	O-ring, PG9, Buna-N	\$4.00
28	177579	LED filter med grey	\$33.00

REPLACEMENT PARTS



MSI-8004HD

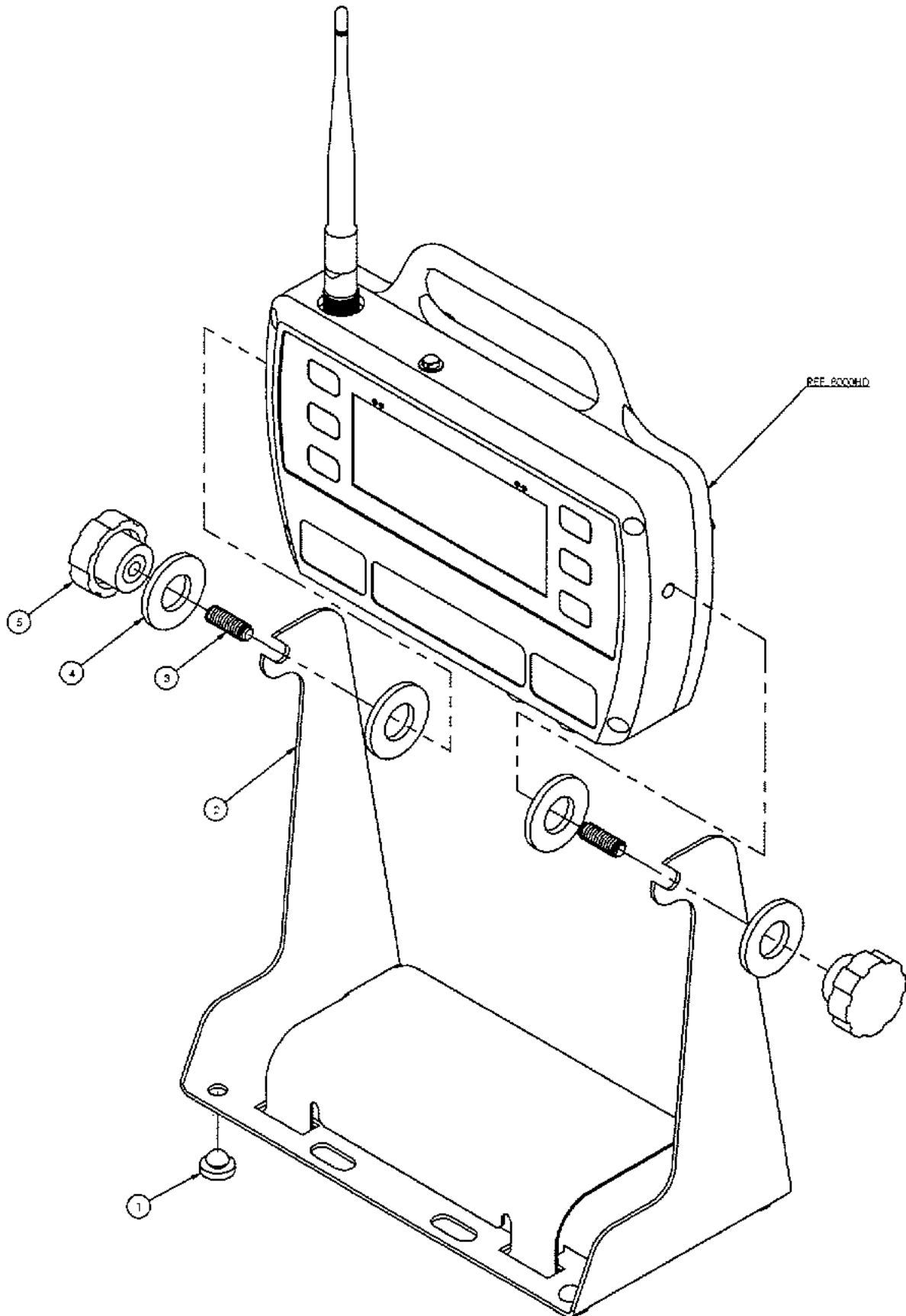
Gen 1 Optional Kit Tilt Stand



Part Number/Price

Item #	Part #	Description	Price
1	143224	Bumper molded sbr .078	\$4.00
2	155172	Tilt stand 8000HD	\$59.00
3	155192	Screw set 5/16-18 × 7/8	\$4.00
4	146200	Washer flat nylon .315 ID	\$4.00
5	143879	Knob fluted 5/16-18	\$17.00

REPLACEMENT PARTS



MSI-8004HD

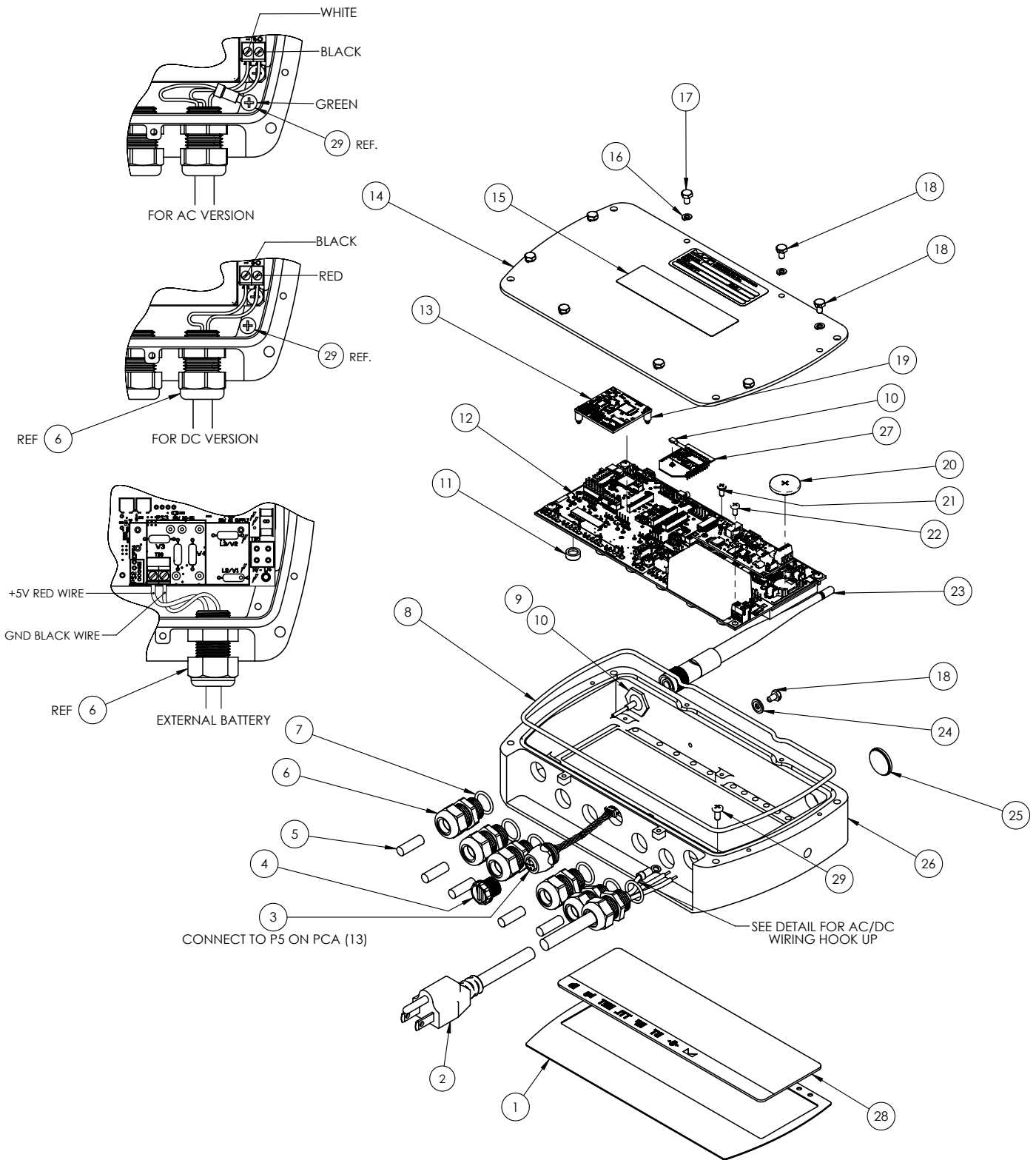
Gen 2 Display AC



Part Number/Price

Item #	Part #	Description	Price
1	221264	Overlay, gen 2	\$25.00
2	160518	Power cord AC in	\$45.00
3	139449	Cable assembly comm serial	\$56.00
4	143352	Conn closure cap IP68	\$4.00
5	141991	Pin round acetal 0.75 in diameter	\$4.00
6	141593	Conn, feed through, liquid	\$8.00
7	177363	O-ring, PG9, Buna-N	\$4.00
8	153110	O-ring 7-1/4 x .103	\$6.00
9	153793	O-ring 1/2 Id x .070	\$4.00
10	159205	Cable assembly RF coax	Consult
11	177362	Key cap, SMS switches	\$4.00
12	214574	PCA 8004 RF display green/red gen 2	Consult
13	153428	PCA ScaleCore3 no a/d	\$280.00
14	152034	Cover, fixed mount 8000	\$51.00
15	159855	Overlay TranSend FCC	\$5.75
16	146538	Washer split lock, stainless steel #6	\$4.00
17	146022	Bolt HH 6-32 x 1/4 cap, stainless steel	\$4.00
18	143271	Screw mach hex head	\$9.00
19	144929	Spacer miniature dual	\$7.00
20	71408	Battery, lithium CR2032	\$6.00
21	142233	Screw, machine, 4-40 x 3/16, pan head, Phillips, stainless steel	\$4.00
22	146543	Screw, ph 4-40 x 1/4 nylon slot	\$4.00
23	143283	Antenna 2.4 GHz	\$64.00
24	143272	Washer seal #6 steel, zinc plated	\$4.00
25	158438	Plug dia .750 w/adhesive, .10 thick	\$14.00
26	220573	Enclosure machined 8004, gen 2	\$260.00
27	144773	Radio module Xbee-pro	\$155.00
28	177579	LED filter med grey	\$33.00
29	141991	Pin round acetal, 1/4 diameter	\$4.00

REPLACEMENT PARTS



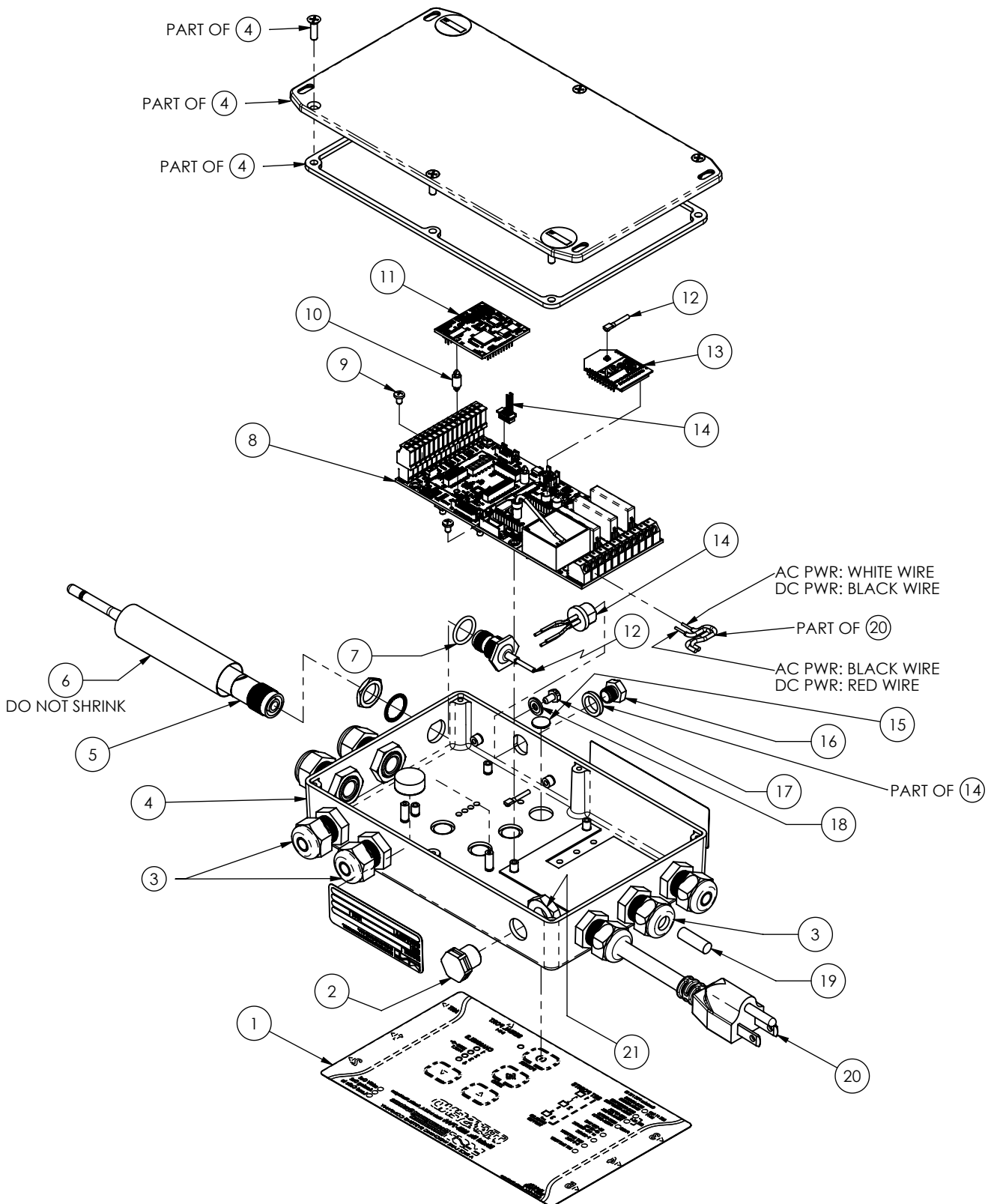
MSI-7000



Part Number/Price

Item #	Part #	Description	Price
1	159334	Overlay	\$20.00
2	88733	Vent, breather sealed	\$22.00
3	141593	Conn feed through liquid	\$8.00
4	158386	Enclosure machined IP66	\$130.00
5	143283	Antenna 2.4 GHz, articulated w/tnc connector	\$64.00
6	142925	Heat shrink polyolefin	\$4.00
7	153793	O-ring, 1/2 id x .070 nitrile	\$4.00
8	166148	PCA 7000 5 V to 6.5 V	\$360.00
9	142233	Screw, machine pan head, 4-40 x 3/16, Phillips, stainless steel	\$4.00
10	144929	Spacer, miniature dual locking, 6 mm long	\$7.00
11	153431	PCA ScaleCore3 4-channel	\$295.00
12	159205	Cable assembly rf coax tnc	\$28.00
13	144773	Radio module Xbee-pro	\$155.00
14	159842	Cable assembly	\$64.00
15	161540	Shim disk 3/8 x .035 w/adhesive	\$4.00
16	144908	Conn closure cap IP68	\$7.00
17	142574	Screw hh dr hd ss blk 6-32 1/4	\$5.00
18	143272	Washer seal #6 steel	\$4.00
19	141991	Pin round acetal, .25 dia	\$4.00
20	159816	Cable w/dc jack 15 ft tpu	\$41.00
21	88734	Nut, breather vent	\$1.05

REPLACEMENT PARTS



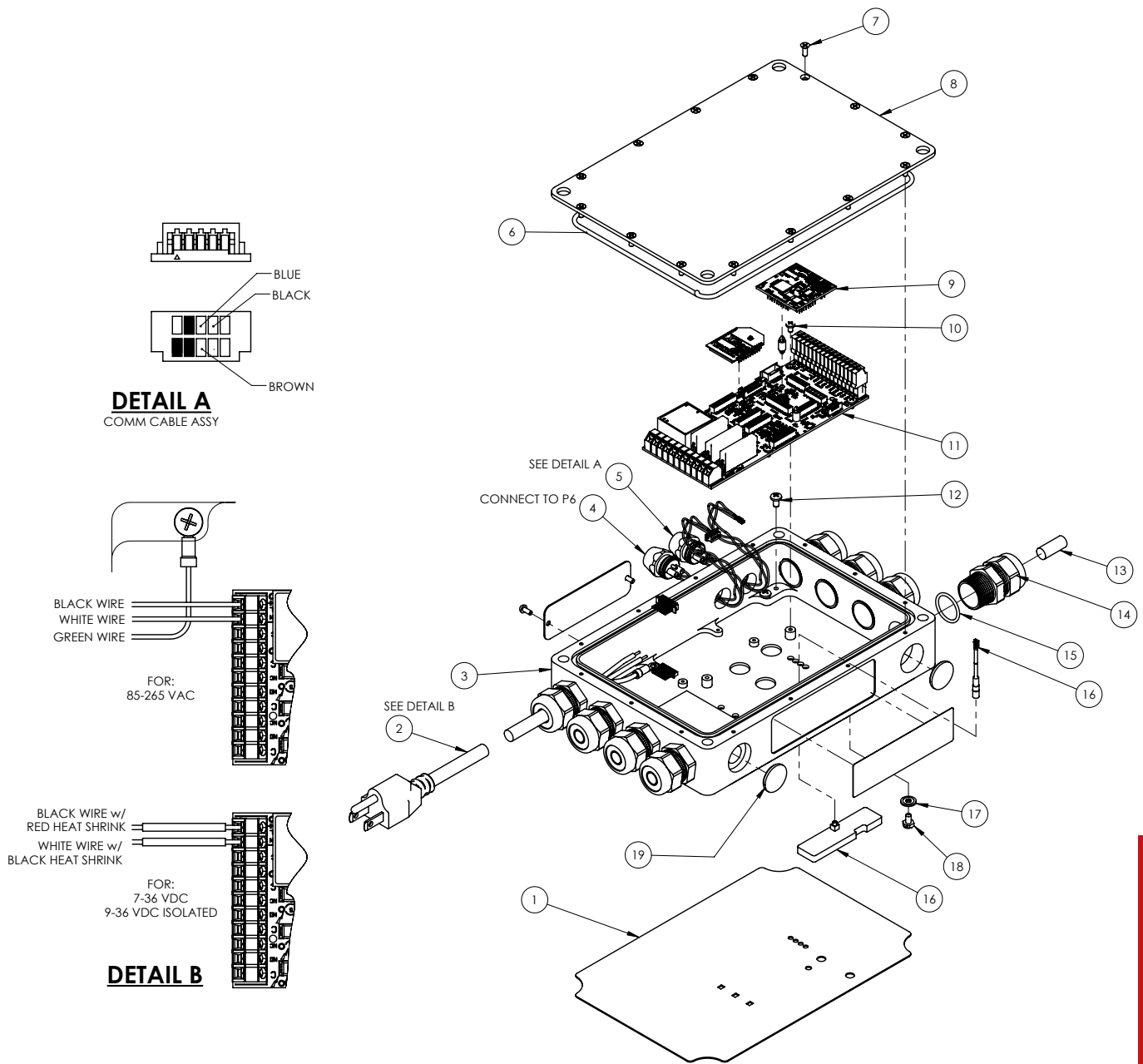
MSI-7000HD



Part Number/Price

Item #	Part #	Description	Price
1	178160	Overlay	\$41.00
2	159137	Cable assembly, 7 to 36 VDC power	\$38.00
3	178022	Enclosure	\$420.00
4	178557	Cable assembly serial comm	\$245.00
5	178491	Cable assembly serial comm	\$54.00
6	174106	O-ring	\$4.00
7	146553	Screw pan head 4-40 × 5/16 Phillips	\$4.00
8	178172	Cover, standard	\$110.00
9	153431	PCA ScaleCore3 4-channel	\$295.00
10	142233	Screw, pan head, locking, 4-40 × 3/16, Phillips, stainless steel	\$4.00
11	178140	PCA 7000HD dual modem	\$205.00
12	144537	Screw, lkg pch ph 6-32 × 1/4, Phillips, stainless steel	\$4.00
13	142554	Pin round acetal 0.312 diameter	\$4.00
14	142229	Conn feed through liquid	\$10.00
15	181774	O-ring neoprene 1/2 npt	\$4.00
16	201823	Antenna 2.4 GHz patch cable	\$40.00
17	143272	Washer seal #6 steel	\$4.00
18	143271	Screw mach hex head	\$9.00
19	158438	Plug diameter 0.750 with adhesive	\$14.00

REPLACEMENT PARTS



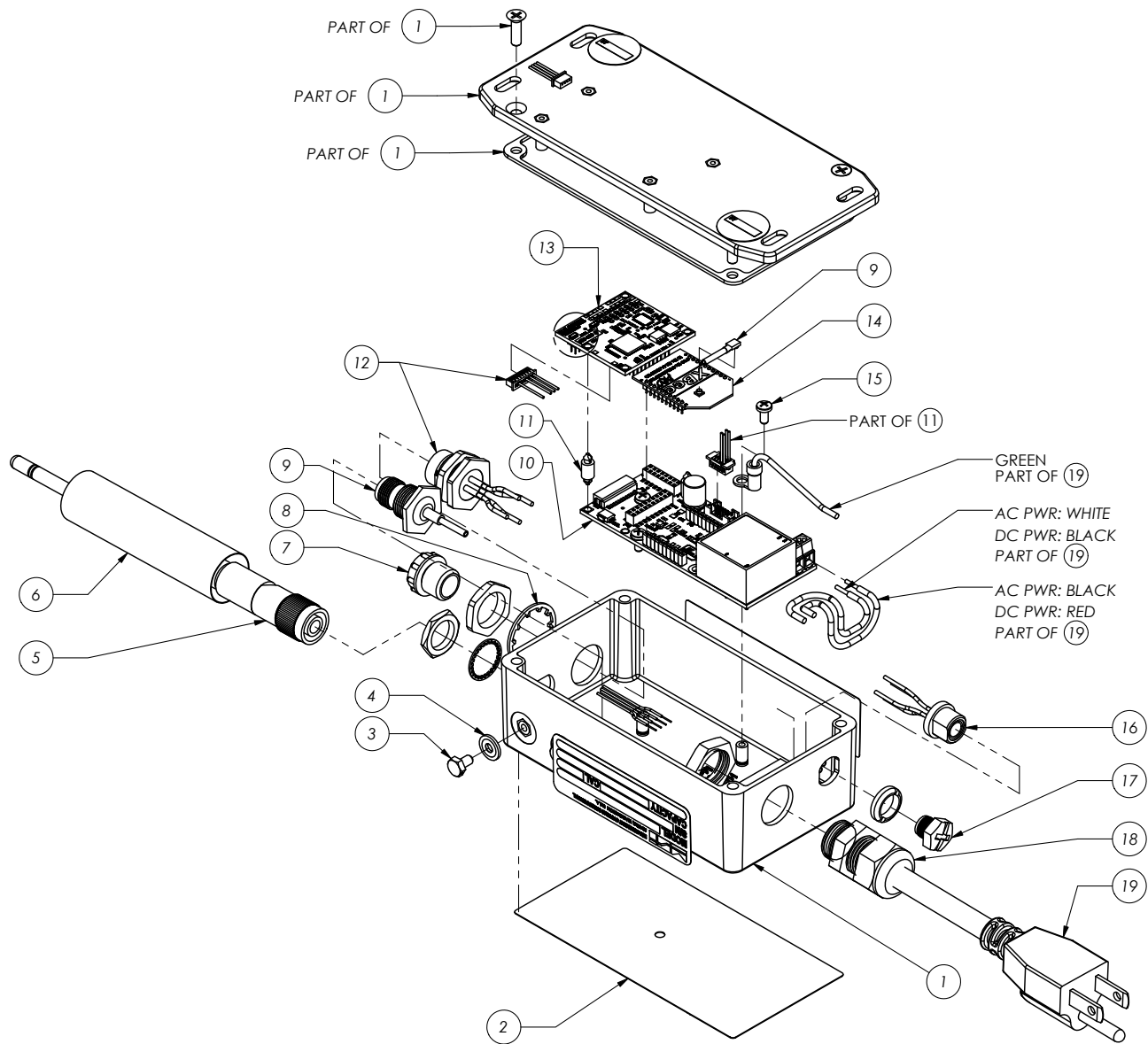
MSI-7001



Part Number/Price

Item #	Part #	Description	Price
1	159732	Enclosure machined	\$97.00
2	160018	Overlay	\$20.00
3	142574	Screw hh dr hd ss blk 6-32 1/4	\$5.00
4	143272	Washer seal #6 steel	\$4.00
5	143283	Antenna 2.4 GHz, articulated w/ TNC connector	\$64.00
6	142925	Heat shrink polyolefin	\$4.00
7	143352	Conn closure cap IP68	\$4.00
8	171384	Lock washer 14 mm	\$5.00
9	152051	Cable assembly RF coax TNC	\$34.00
10	176036	PCA 7001 AC	\$320.00
11	144929	Spacer, miniature dual locking, 6 mm long	\$7.00
12	159838	Cable assembly sensor	\$85.00
13	153430	PCA ScaleCore3 4-channel	\$240.00
14	144773	Radio module Xbee-pro	\$155.00
15	128088	Screw, machine 4-40 x 1/4, Phillips, stainless steel	\$4.00
16	159842	Cable assembly, serial	\$64.00
17	144908	Conn closure cap IP68 picofast	\$7.00
18	141593	Conn feed through liquid tight	\$8.00
19	159189	Power cord AC	\$37.00

REPLACEMENT PARTS



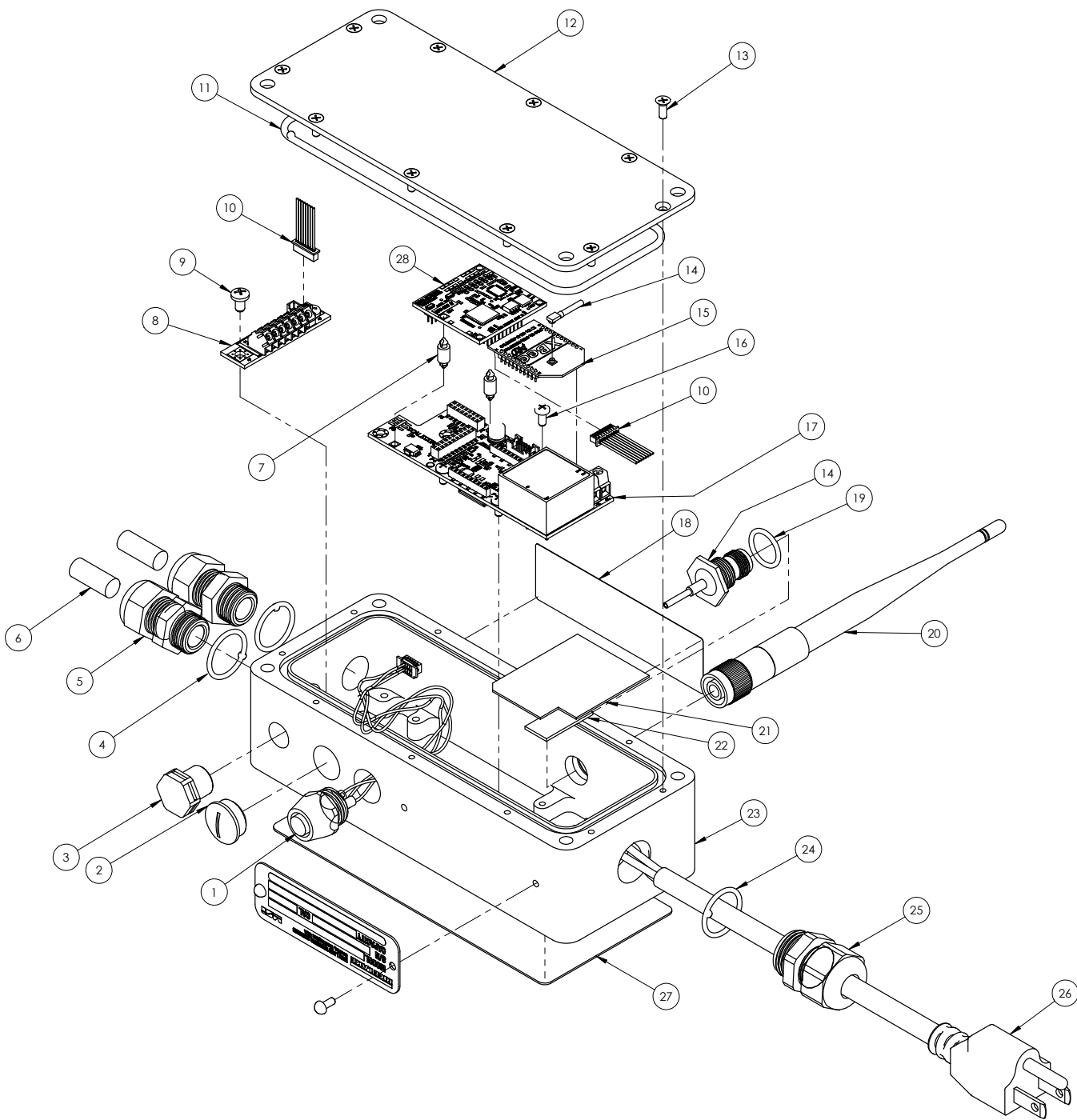
MSI-7001HD



Part Number/Price

Item #	Part #	Description	Price
1	178557	Cable assembly serial comm	\$245.00
2	143746	Plug domed PG9 IP65	\$15.00
3	88733	Vent, breather sealed	\$22.00
4	177363	O-ring, PG9, Buna-N, 8004	\$4.00
5	141593	Conn feed through liquid	\$8.00
6	142554	Pin round acetal 0.312 diameter	\$4.00
7	144929	Spacer miniature dual	\$7.00
8	179595	PCA 7001HD LC term blk	\$255.00
9	146601	Screw pan head 6-32 x 1/4 Phillips	\$4.00
10	182635	Cable assembly int load cell	\$39.00
11	181832	O-ring	\$4.00
12	179213	Enclosure cover	\$32.00
13	146553	Screw flat head 4-40 x 5/16 Phillips	\$4.00
14	152051	Cable assembly RF coax	\$34.00
15	144773	Radio module Xbee-pro	\$155.00
16	128088	Screw 4-40 x 1/4 pan head Phillips	\$4.00
17	176036	PCA 7001A, AC power supply	\$320.00
18	159855	Overlay TranSend FCC	\$5.75
19	153793	O-ring 1/2 ID x .070	\$4.00
20	143283	Antenna 2.4GHz	\$64.00
21	181880	Insulator AC	\$4.00
22	148591	Adhesive pad	\$4.00
23	178490	Enclosure	\$150.00
24	146251	O-ring 70 durometer	\$4.00
25	142885	Conn feed through liquid	\$8.00
26	179558	Power cord AC in	\$32.00
27	179390	Overlay	\$23.00
28	153430	PCA ScaleCore3 2-channel	\$240.00

REPLACEMENT PARTS



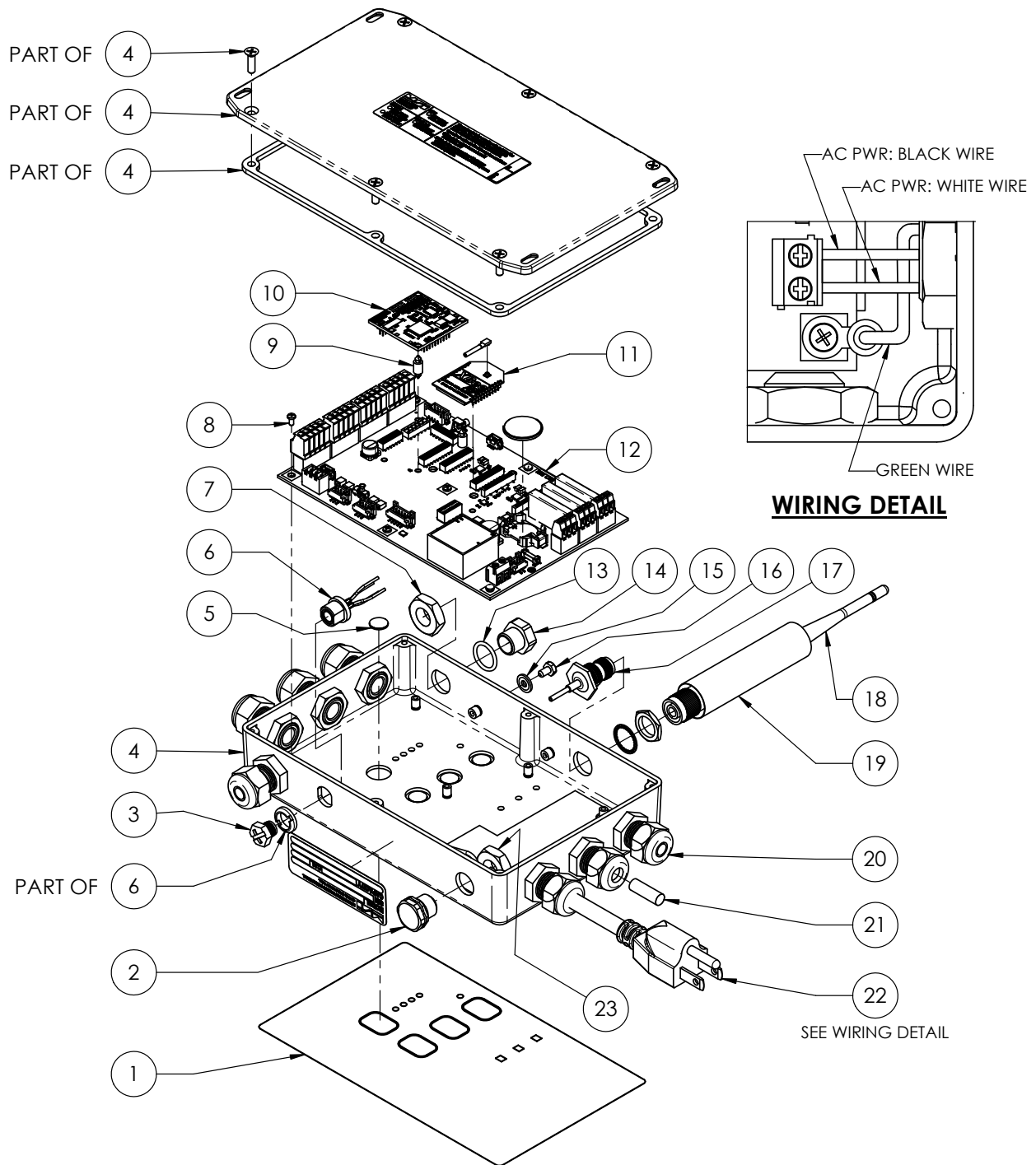
REPLACEMENT PARTS



Part Number/Price

Item #	Part #	Description	Price
1	226496	Overlay, 7000 Gen 2	\$75.00
2	88733	Vent, breather sealed	\$22.00
3	144908	Conn closure cap IP68	\$7.00
4	226487	Enclosure machined	\$84.00
5	161540	Shim disk 3/8 x .035 w/ adhesive	\$4.00
6	159842	Cable assembly, serial	\$64.00
7	159583	Nut, M12 nylon	\$4.00
8	142233	Screw, machine pan head, 4-40 x 3/16, Phillips, stainless steel	\$4.00
9	144929	Spacer, miniature dual locking, 6 mm long	\$7.00
10	153431	PCA ScaleCore3 4-channel	\$295.00
11	144773	Radio module Xbee-pro	\$155.00
12	221279	PCA 7000 AC w/ coil relays	\$650.00
13	153793	O-ring 1/2 in ID	\$4.00
14	159584	Plug, M12 nylon	\$4.00
15	143272	Washer seal #6 steel	\$4.00
16	142574	Screw hh dr hd ss slk 6-32 1/4	\$5.00
17	159205	Cable assembly RF coax TNC	\$28.00
18	143283	Antenna 2.4 GHz, articulated w/ TNC connector	\$64.00
19	142925	Heat shrink polyolefin	\$4.00
20	141593	Conn feed through liquid tight	\$8.00
21	141991	Pin round acetal, .25 dia	\$4.00
22	159189	AC power cord	\$37.00
23	88734	Nut, breather vent	\$1.05

REPLACEMENT PARTS

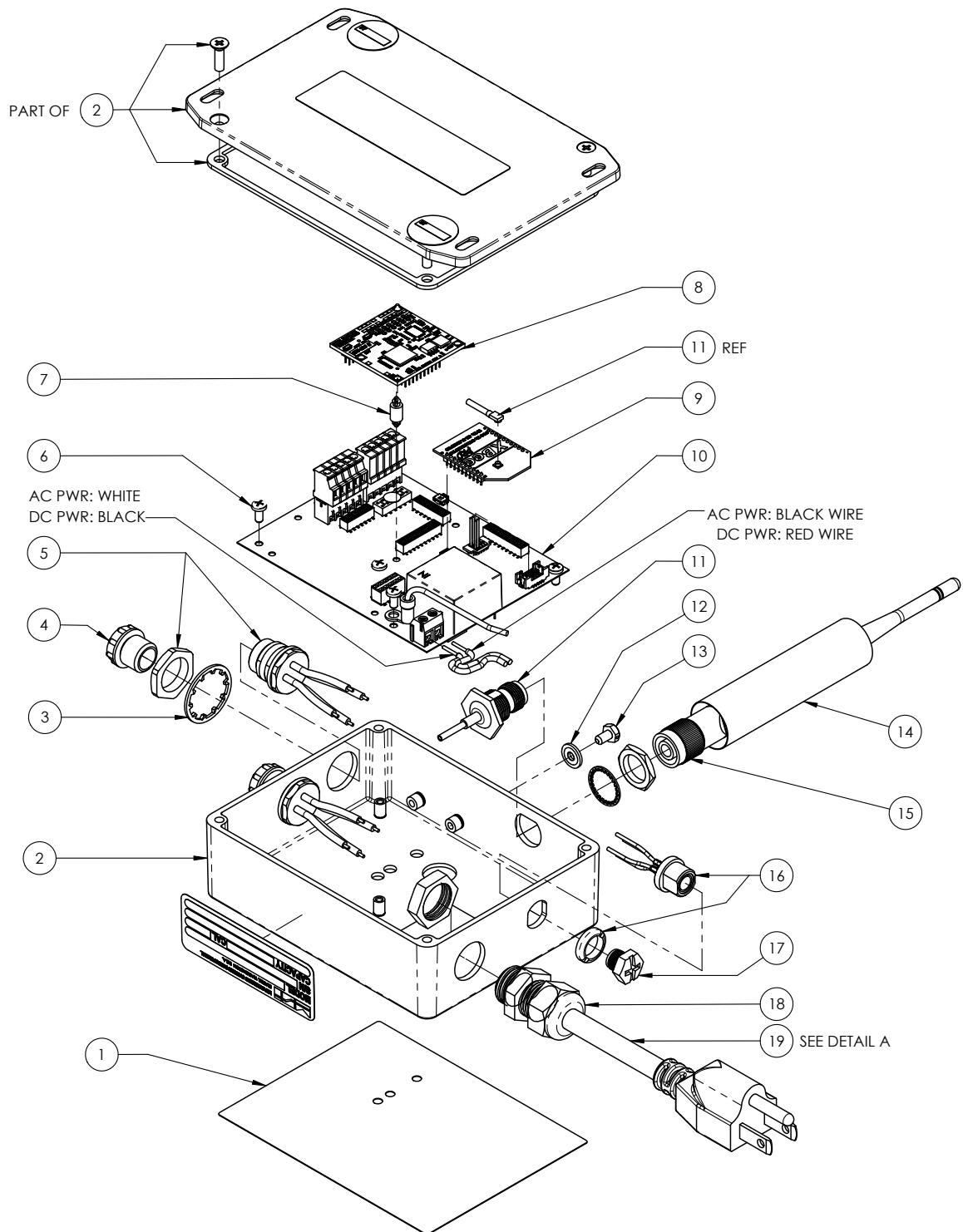




Part Number/Price

Item #	Part #	Description	Price
1	230320	Overlay	\$55.00
2	229662	Enclsoure machined	\$90.00
3	171384	Lock washer internal tooth 14mm	\$5.00
4	143352	Conn closure cap IP68 male	\$4.00
5	231015	Cable assembly sensor 7001 gen 2	\$55.00
6	128088	Screw, machine 4-40 x 1/4 Phillips, stainless steel	\$4.00
7	144929	Space, miniature dual locking, 6mm long	\$7.00
8	153430	PCA ScaleCore3 2-channel	\$240.00
9	144773	Radio module Xbee-pro	\$155.00
10	231219	PCA 7001 Gen2 85-265 VAC	\$550.00
11	152051	Cable assembly rf coax tnc	\$34.00
12	143272	Washer seal #6 steel	\$4.00
13	142574	Screw hh ddr hd ss blk 6-32 1/4	\$5.00
14	142925	Heat shrink polyolefin	\$4.00
15	143283	Antenna 2.4 GHz, articulated w/ tnc connector	\$64.00
16	159842	Cable assembly serial	\$64.00
17	144908	Con closure cap IP68 picofast male	\$7.00
18	141593	Conn feed through liquid	\$8.00
19	159189	AC power cord	\$37.00

REPLACEMENT PARTS



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Questionnaires

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Overhead Weighing Systems Questionnaire



Company: Name:
Date: Phone: Email:

Weighing Application Information

System/Application Description:

Goals for Weighing Systems:

Scale Requirements

Scale Type:

Scale/system capacity: ☐ lb ☐ kg ☐ ton ☐ metric ton ☐ other

Number of load cells:

Legal for Trade? ☐ Yes ☐ No

Transmitter power
(at load cells): ☐ AC ☐ DC voltage ☐ Battery

Receiver Power: ☐ AC ☐ DC voltage ☐ Battery

Check any desired output options (if applicable):

mV output ☐ Yes ☐ No

Analog output ☐ Yes ☐ No

Relays ☐ Yes ☐ No

Remote Requirements

Remote control required? ☐ Yes ☐ No

Remote display required? ☐ Yes ☐ No

If remote display IS NOT required:

Are Zero, Tare and On/Off capabilities required? ☐ Yes ☐ No

If remote display IS required:

Are Zero, Tare and On/Off capabilities required from the remote display? ☐ Yes ☐ No

Does the remote display need to be handheld or mounted? ☐ Handheld ☐ Mounted

Is the remote display wireless or hardwired? ☐ Wireless ☐ Hardwired

Radio Frequency

Transmission Distance: ☐ ft ☐ m

Line of sight: ☐ Yes ☐ No

Obstructions (list any):

Potential sources of RF interference:

Are there other RF systems present? ☐ Yes ☐ No
If yes ☐ Indoor ☐ Outdoor

Weighing Application Information

This sketch will be used by our technicians to help find the optimal antenna types and locations for this application.

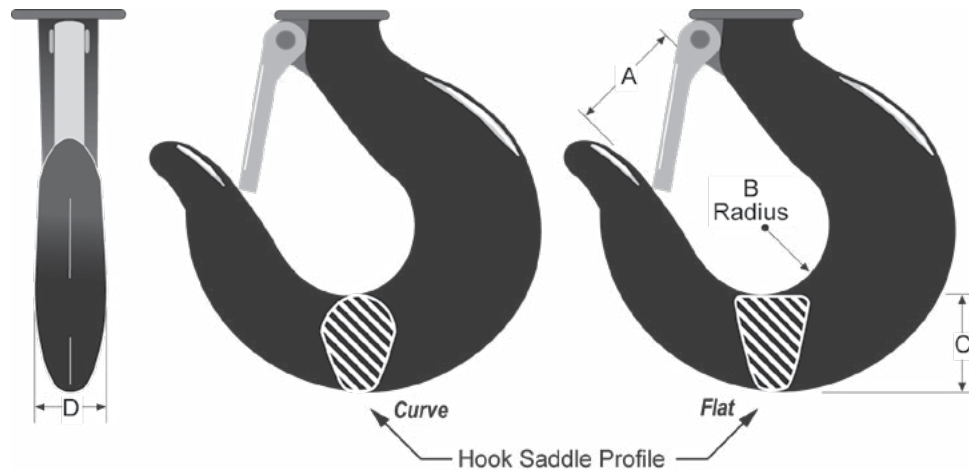
- Include all transmitters and receivers that are part of this weighing system
- Include any other transmitters or receivers operating at 2.4 GHz
- Include any RF barriers, such as concrete walls, large steel equipment, cages
- Include sources of interference, such as high-power electrical motors and generators
- Include dimensions so we can understand the range and antenna gain requirements

Rigging Hook Questionnaire



Company: Name:
Date: Phone: Email:

Dimensions



Unit of Measure: ☐ Inch ☐ Millimeter

A **B** **C** **D**

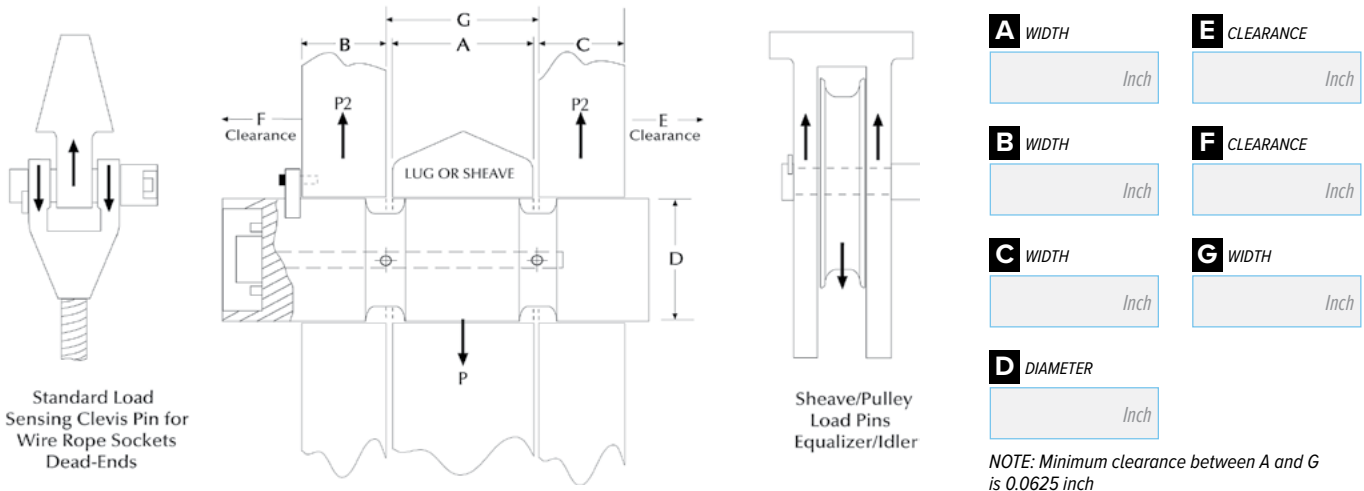
Profile: ☐ Curve ☐ Flat Capacity:

Note: Reference your existing hook, also making sure these dimensions will meet your current rigging needs.

Load Pin Questionnaire

Company: Name:
Date: Phone: Email:

Load Pin Critical Dimensions



Load Pin Data

Lube port: ☐ Yes ☐ No No. of exits
Hoist capacity: tons
Part of wire rope:
Sensor capacity: tons
Safety factor: ☐ 3:1 ☐ 5:1 ☐ 7:1 ☐ 10:1
Application:

Accuracy requirement:
Temperature requirement:
Output requirement:
Material testing requirements:
Load vector orientation/alignment:
☐ ← ☐ → ☐ ↑ ☐ ↓

Cable Connections

☐ End-mounted cable:
☐ End-mounted connector (standard):
☐ Side-mounted cable:
☐ Side-mounted connector
☐ Recessed connector:

Sensor's cable length: feet

Comments:

Low Headroom Weighing Questionnaire

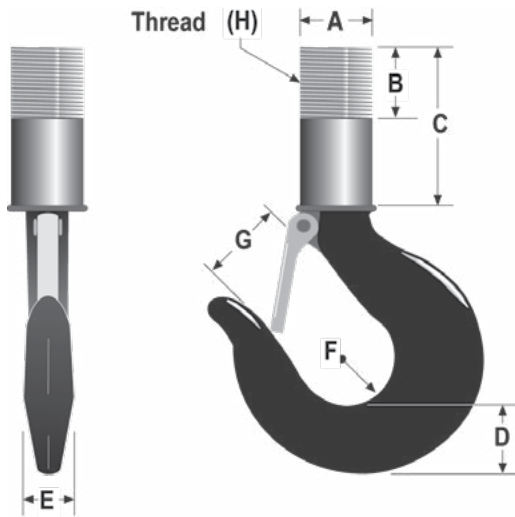


Concern: *Minimal vertical headroom.*

Solution: *In-block adapter with special hook (if needed).*

Company: Name:
 Date: Phone: Email:

Dimensions From Existing Crane Hook

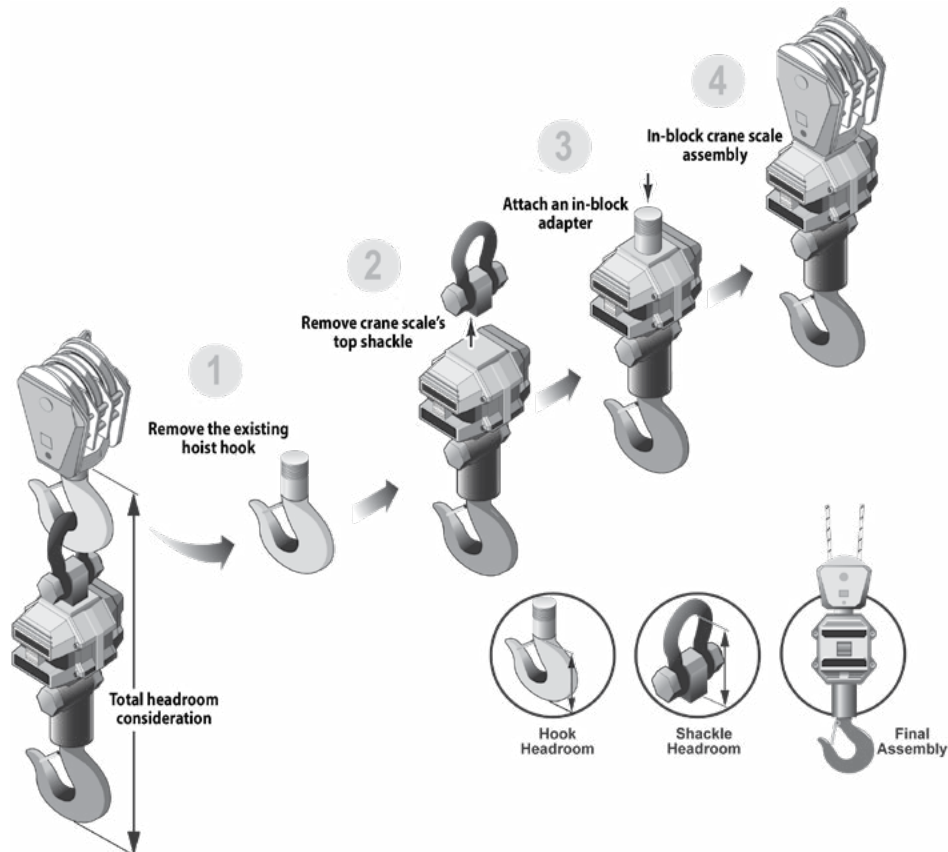


Unit of Measure: ☐ Inch ☐ Millimeter

A	<input type="text"/>	B	<input type="text"/>
C	<input type="text"/>	D	<input type="text"/>
E	<input type="text"/>	F	<input type="text"/>
G	<input type="text"/>	H	<input type="text"/>

Hook Capacity:

☐ lb ☐ kg ☐ ton ☐ metric ton ☐ other



Dyna-Clamp Tension Meter Questionnaire



Company: Name:
 Date: Phone: Email:

Weighing Application Information

Industry used in:

Is a protective case required: ☐ Yes ☐ No

Wire Rope Pre-calibration

There are up to eight factory calibrations provided. The information provided below will be used for those calibrations.

	Rope/Cable Diameter	Strand Arrangement	Rope/Cable Material	Minimum Breaking Load (MBL) if known	Working Load Limit* (WLL) if known
1.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.	<input type="text"/> <input type="checkbox"/> inch <input type="checkbox"/> mm	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

*If working load limit is not known, we will calculate it as a maximum of 20% of the MBL.

Wi-Fi Information Request



Customer Number:

Company: Name:

Date: Phone: Email:

Network Topology

In order to customize a Wi-Fi module, the following information is required.

Product: Electronics Serial Number:

☐ Server (Soft AP):

*User's laptop or tablet is connecting directly to the scale.
Only one module may be connected at a time in this mode.*

☐ Client:

The scale connects to an existing router. This allows a laptop or tablet to connect to multiple scales at once.

Server Mode

SSID:

The name for the network that the laptop/tablet is connecting to.

Security Mode:

☐ **Open:** Allow anyone to connect to the scale

☐ **WPA2:** Require a password to connect to the scale

Password:

Only necessary if security mode is set to WPA2

DHCP:

☐ **On:** Assign a dynamic IP to the scale. The laptop/tablet connecting to the scale may have a dynamic IP (RECOMMENDED)

☐ **Off:** Assign a static IP to the scale. The laptop/tablet connecting to the scale must also have a static IP

IP Address-Static IP of the scale:

Net Mask/Gateway to assign to the scale:

Port used to connect to the scale (default 2000):

Client Mode

SSID:

The SSID of the router the scale will connect to.

Security mode of the router:

☐ **Open:**

☐ **WPA2:**

Password:

This is the password used to connect to the router.

DHCP:

☐ **On:** Allow the router to assign a dynamic IP to the scale (RECOMMENDED)

☐ **Off:** Assign a static IP to the scale. This IP must be added to the static IP list in the router

IP Address-Static IP of the scale:

Net Mask/Gateway to assign to the scale:

Port used to connect to the scale (default 2000):



The Overhead Weighing Solutions Buyer's Guide

INFORMATION TO HELP YOU CHOOSE A SYSTEM
FOR YOUR OVERHEAD WEIGHING NEEDS



RICE LAKE®
WEIGHING SYSTEMS

800-472-6703

www.ricelake.com

Contact Information

U.S. Sales/Technical Support
Phone 206-433-0199
Toll Free 800-874-4320

Canada Sales/Technical Support
Phone 800-321-6703

Mexico Sales/Technical Support
Phone +52 81 8356 5062

Fax 206-244-8470

Email prodinfo@ricelake.com

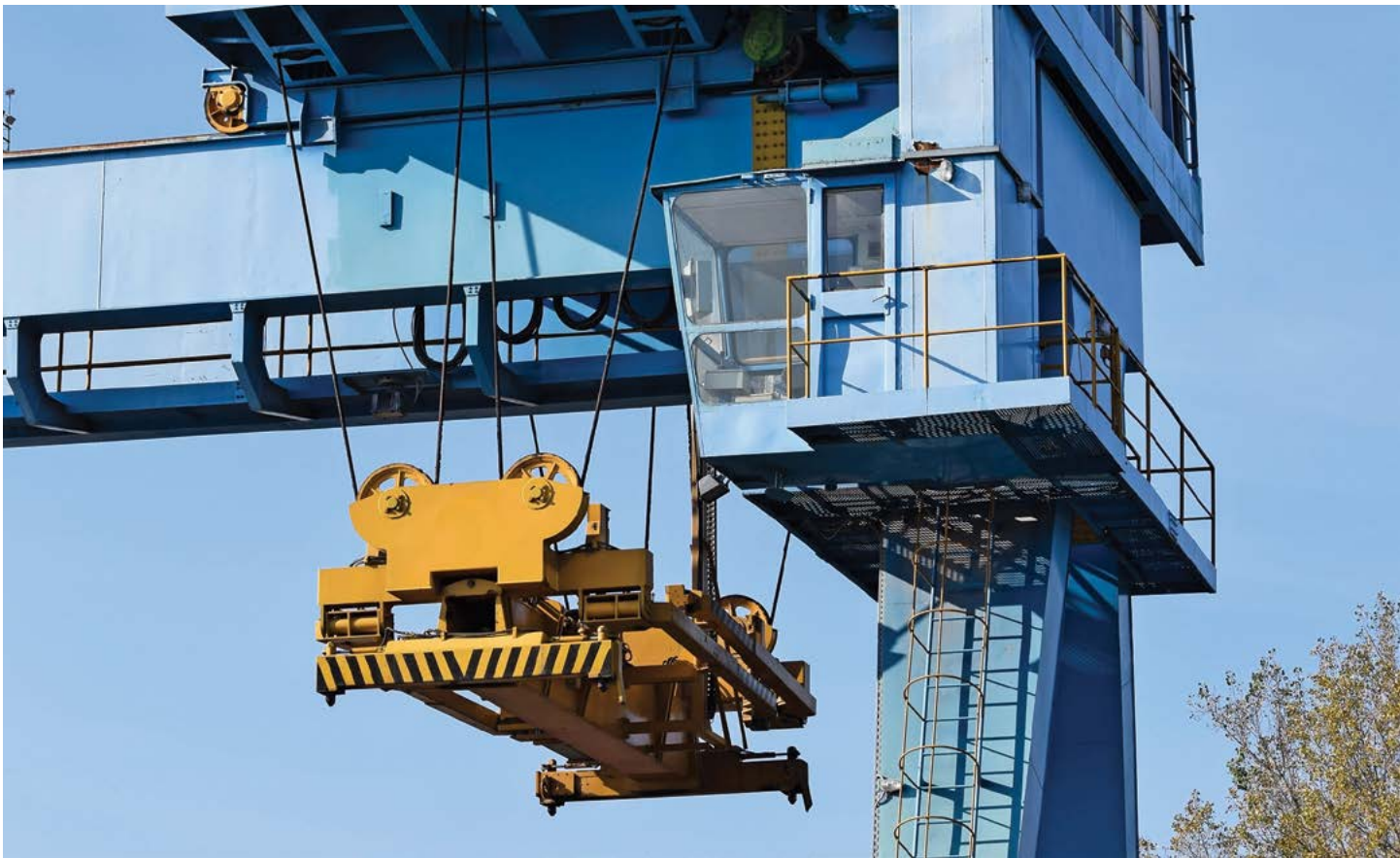
Website www.ricelake.com/msi

Customer Assistance and Service
Department Hours
Weekdays 6:30 AM to 6:30 PM (CST)
Saturday 8:00 AM to 12:00 PM (CST)

Customer assistance available
in English, Spanish and French

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Introduction

Rice Lake Weighing Systems' Measurement Systems International (MSI) brand of overhead weighing systems offers a comprehensive selection of quality weighing devices from tension dynamometers to crane scales and the latest electronics to satisfy the demands for any application.

MSI's tension dynamometer and selection of crane scales are durable and dependable solutions for a wide range of capacities and applications. Whether you need custom overload protection, a simple load monitoring device or a legal for trade system, MSI has a product to fit your unique requirements. Our robust load sensing systems excel in challenging and high-temperature environments at the same time meeting OSHA's 5:1 factory of safety. From fishing and marine scale applications to heavy capacity coil handling, MSI overhead weighing equipment has a place in virtually every environment.

Overhead Weighing Systems Complement Every Industry

- | | |
|------------------------------|---------------------------------------|
| • Port and Freight Terminals | • Chemical Processing |
| • Construction | • Fishing Industry |
| • Concrete Production | • Energy Production |
| • Mining Facilities | • Material Handling |
| • Steel Mills and Foundries | • Aviation/Helicopter Load Monitoring |
| • Waste Management | |





MSI-4260M

Crane Scales

Crane scales ensure safety and accurate load measurements in for many applications. When used properly, crane scales can help prevent unsafe conditions by providing real-time measurement of the operational load and immediate feedback to operators and/or integrated safety systems.

MSI-3460 Challenger 3

The MSI-3460 offers long-range viewing with a 1.5-inch, ultra-bright, multi-color LED digital display. The MSI-3460 is suitable for light- to medium-capacity applications up to 15,000 pounds.

MSI-4260 Port-A-Weigh

The MSI-4260 is built for heavy-duty dynamic weighing, ideal in bridge crane, foundry and in-process material handling applications.

MSI-4260 IS Intrinsically Safe Port-A-Weigh

The MSI-4260 IS is intrinsically safe, featuring a 5:1 Ultimate Safety Factor meeting OSHA, ANSI and ASME safety requirements.



MSI-3460
Challenger 3



*MSI-9600HT Hi-Torque
Port-A-Weigh Plus*

MSI-4260M

The MSI-4260M is the most robust scale on the market for marine and industrial weighing, it is able to capture weight with $\pm 0.1\%$ accuracy and a resolution between 3,000 and 5,000 divisions.

MSI-6360 Trans-Weigh

The MSI-6360 is ideal for medium- to heavy-capacity and high duty-cycle applications not requiring an integral display.

MSI-9600HT Hi-Torque Port-A-Weigh Plus

The MSI-9600HT is designed with a high torque load train for applications with a motorized rotating hook. Available in capacities up to 100 tons.



*MSI-6360
Trans-Weigh*



Tension Dynamometers

Tension dynamometers, or simply dynamometers, can be used to measure either vertical or horizontal tension. Rugged but lightweight, dynamometers are ideal for measuring tension in rigging, load tests, crane and elevator certification, and other straight-line lift and weigh applications.

MSI-7300 Dyna-Link 2

The MSI-7300 is the industry's most advanced digital dynamometer. Constructed of high-grade, aircraft-quality aluminum with an anodized finish and gasket sealing. For capacities 100,000 pounds and higher, made with zinc-plated 4340 mild steel. The Dyna-Link 2 is a lift and weigh device built to address caught-load or slack-line issues that may cause unsafe conditions.



MSI-7300

MSI Dyna-Clamp Tension Meter

The MSI Dyna-Clamp clamp-on tension meter is safe and easy to use, with a site window ensuring accurate placement of the wire rope being tested by the operator. Unlike other clamp-on tension meters, the Dyna-Clamp is designed with an easy-turn power screw that doesn't require as much manual force to engage the wire rope the operator is testing.



MSI Dyna-Clamp
Tension Meter

Integrated Solutions

MSI integrated solutions are versatile enough to be applied no matter the headroom, capacity or environment. Load pin sensors, tension links and clamp-on load cells can bring overhead weighing solutions to the next level.

MSI Clamp-on Load Cell

Clamp-on load cells measure wire rope tension to prevent overloads on overhead cranes and hoists with minimal modification to existing infrastructure.

Low Headroom Option Available

The low headroom option integrates a below-the-hook crane scale directly into the bottom block by replacing the existing hook.



MSI Clevis Load Pin Sensors

Load pin sensors are custom-designed and constructed of strictly industrial-grade stainless steel, providing extreme durability and a minimum 5:1 Ultimate Safety Factor to any integrated overhead weighing solution.

MSI Shear Web Load Cell

Shear web load cells compensate for hook rotation and eliminate headroom loss without sacrificing accuracy.

MSI Tension Link

The tension link is suited for integration with cranes, offering force measurement for lifted items by measuring at the dead-end becket.



Rugged Remote



MSI-8000 RF Remote Display

Indicators, Remotes and Remote Displays

Indicators communicate weight data and increase process control. Remotes enable certain commands to be sent, wirelessly, to a crane scale. Remote displays allow operators to use weighing systems from a distance, promoting safety and efficiency.

MSI-8000 RF Remote Display

The MSI-8000 is a full-featured handheld remote display enabling users to operate weighing systems from a distance—and out of harm's way.

MSI-8000HD Indicator/RF Remote Display

The MSI-8000HD's full waterproof construction resists harm from the elements, making it an especially resilient indicator.

Rugged Remote

The MSI Rugged Remote is a heavy duty remote control that allows the operator to wirelessly zero or tare their crane scale, as well as power on or off.



MSI-8004HD Indicator/RF LED Remote Display

With the multi-color (red, green and orange) display, the MSI-8004HD provides longer viewing distances for more diverse environments and applications.



MSI-8004HD Indicator/RF LED Remote Display



Indicators, Remotes and Remote Displays



SCT-2200 Advanced Series Signal Conditioning Weight Transmitter

1280 Enterprise™ Series Indicator

The 1280 Enterprise Series with a color touchscreen, web server view and multiple protocol types delivers uncompromising speed in any overhead weighing environment.

SCT-2200 Advanced Series Signal Conditioning Weight Transmitter

For PLC systems that require weight data from a scale, Rice Lake's compact SCT transmitters deliver equivalent signal-conditioning function without the cost or bulk of a full-sized weight indicator or controller.

Wireless Network Solutions

From the initial weightment on the scale to the final numeric value on the indicator, efficient communication is key to the success of the entire overhead weighing process. Wireless transmitters and receivers easily communicate data between various electronics in your scale system.

TranSend™ Wireless Load Cell Interface

TranSend is a wireless load cell interface that transforms load cell signal and transmits the data wirelessly to a receiving unit.

MSI ScaleCore Webserver

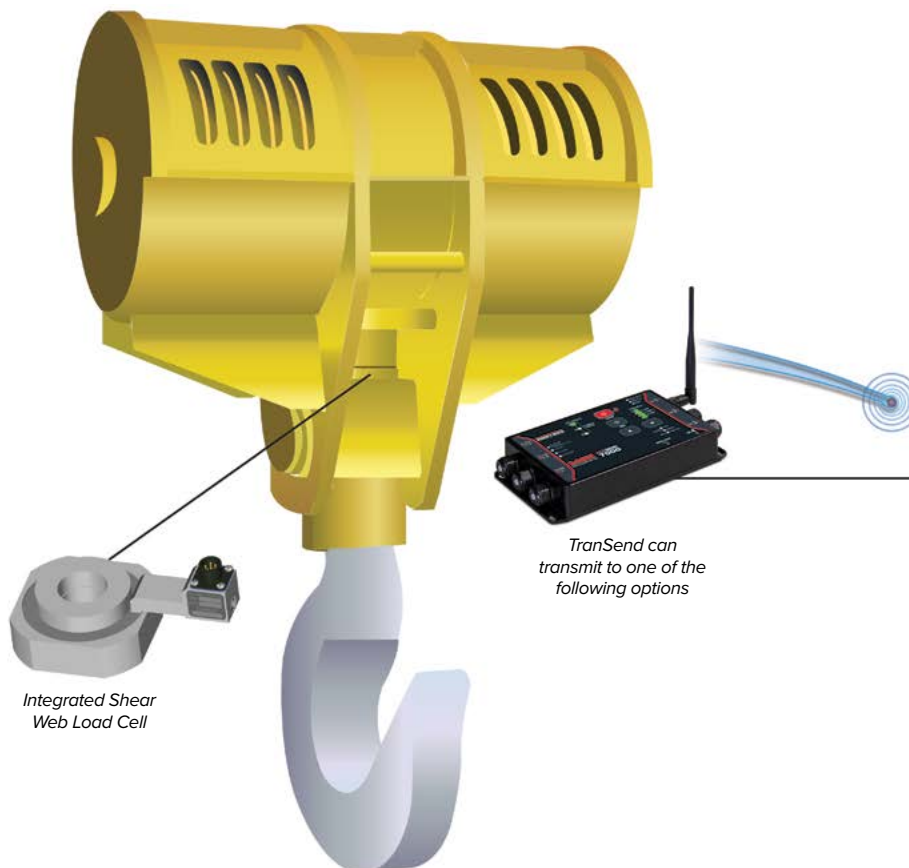
The MSI ScaleCore Webserver is a network interface with a built-in web browser for remote monitoring of a scale system. Communicate with any combination of up to seven devices and any MSI ScaleCore based scale or weighing instrument equipped with a Wi-Fi module.



TranSend Wireless Load Cell Interface



MSI ScaleCore Webserver



Integrated Shear Web Load Cell

TranSend can transmit to one of the following options





Before You Buy

Crane scales measure real-time operational loads and provide immediate feedback to operators to prevent unsafe conditions. Determine the best crane scale for your application by exploring your overhead weighing goals and analyzing aspects of your environment.

Overhead Weighing Goals

- Load monitoring prevents crane accidents, ensures compliance, maintains employee safety and protects equipment. Scales should meet OSHA, ANSI, ASME and other safety design standards (5:1 Ultimate Safety Factor). Accuracy is 1-3 percent full scale.
- Process control helps meet the requirements of in-process crane scales, which include accurate weighments, real-time information and integration with manufacturing data acquisition systems. Accuracy is 0.1% full scale.
- Data integration systems increase informational exactness and control, stream data from the weighing system to a customer's database program and help reduce human error.

RF and Signal Processing Solutions

Add traceability and transparency to your processes. With several methods of radio frequency (RF) technology, wireless communication products can be easily integrated with almost any industry or environment.

Whether used in shipping, material handling, foundries, shipyards, construction or freight applications, Rice Lake's MSI brand of trusted overhead weighing solutions assists in creating safe and efficient operations.

Crane Weighing Solutions

Common overhead weighing equipment includes below-the-hook crane scales, integrated scales, integrated sensors and RF and signal processors. From bridge cranes to gantry and tower cranes, rugged, reliable overhead weighing solutions are available for many different applications.

Below are common types of cranes and their ideal weighing systems:

Monorail Hoist

The most commonly used hoist is the monorail hoist, which uses a chain hoist or block with wire rope or cable and has a 1- to 10-ton capacity. Due to their high capacity and versatility, monorail hoists are often used in industrial facilities.

Recommended scale: MSI-4260

Jib Crane

A jib crane is designed with a horizontal member supporting a moveable hoist and is commonly used in workstation applications and machine shops. It is also useful in production and shipping where there may be a need to weigh smaller machine parts during or after production to check weight for shipment.

Recommended scale: MSI-3460

Overhead Bridge Crane

Overhead bridge cranes can range from 1- to 100-ton capacity, or greater. The trolley moves laterally while the bridge moves longitudinally to cover a specific area or the entire facility. This crane offers a wide range of motion and creates efficiency for lifting and moving applications.

Recommended scales: MSI-4260, MSI-4260M, MSI-6360, MSI-9600HT and MSI Integrated Sensor System

Rail Mounted or Rubber Tire Gantry

The rail mounted or rubber tire gantry moves similarly to a bridge crane and is frequently found in outdoor factory applications such as steel yards, paper mills and other heavy industrial facilities. They are common on rails or tires, as well as in heavy capacity weighing industries where capacities can range from 1- to 200 tons.

Recommended scale: MSI-4260, MSI-6360 and MSI Integrated Sensor System

Semi Gantry

Similar to a gantry crane, a semi gantry has one end of the bridge rigidly supported on one or more legs that run on a fixed rail or runway. The other end of the bridge is supported by a truck running on an elevated rail or runway.

Recommended scale: MSI-3460, MSI-4260, MSI-6360 and MSI Integrated Sensor System

Integrated Weighing Solutions

Most bridge, monorail, jib, gantry and straddle crane safety systems employ an integrated load sensing system. An integrated load sensor is installed and integrated where the load is consistently applied relative to the actual load the crane is handling, generally with sheave pin, load link and compression designs.

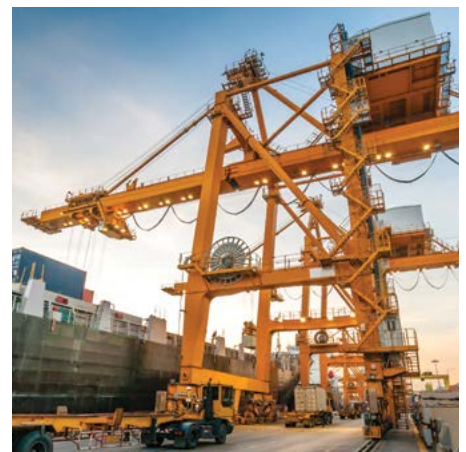
Contact your MSI sales/solution specialist for assistance in selecting the right solution for you.



We recommend the MSI-3460 for jib cranes.



Bridge cranes pair well with a variety of MSI scales, though environment can impact the choice.



Multiple MSI scales can be used with rail mounted and rubber tire gantry cranes.

Create an Integrated System

01

Determine what type of sensor you need.

- Load pins offer accuracy of 1-3% of their rated capacity
- Load links and shear web load cells have an accuracy of 0.5% of their rated capacity
- Clamp-on load cells have an accuracy of 3-5% of the hoist capacity and will accommodate a wire rope up to 3/4 inch in diameter
- Custom sensors are also available

02

Choose a cable length.

- Options include 5, 10, 15, 20, 25 and 30 feet
- Rice Lake recommends using a bulkhead connector with a mating cable
- Custom length cables are available

03

Decide whether you want an RF transmitter or signal conditioner.

- TranSend™ Series (100-300 ft)
- SCT-2200 Wired Solution





04

Choose a remote display or indicator.

- Handheld: MSI-8000
- LCD: MSI-8000HD
- LED: MSI-8004HD



05

If needed, you can customize your application with:

- ScaleCore Webservice
- MSI-8000HD, MSI-8004HD
- Programmable: 1280 Enterprise™ Series*
**custom user programs are available.*
- Wide selection of Signal Conditioning Transmitters



06

Select a remote display.

- Hardwired or wireless
- 4- or 6-inch LaserLight2®



Tips for Installation

Get years of successful operation from your MSI overhead weighing systems with these tips and best practices for installation and calibration.

Required Equipment and Documentation

The following items are necessary for successful installation, configuration, simulated calibration, pre-calibration or final calibration of MSI scales and systems:

- Laptop with MSI Configuration Program downloaded
- Product-specific serial cables
- PN 178501 USB to serial converter cable
- Manuals (digital or hard copy)

Load cell simulators and system schematics, available by request at the time of order, are technically optional equipment and documents. However, simulators and system schematics can help troubleshoot problems that may occur during installation.

Additionally, test weights for calibration and weight verification are required for integrated systems, but are recommended for calibrating other MSI products as well.

Best Practices for a Successful and Timely Installation

Before beginning installation, power on all of electronics to ensure basic system functionality. If there is an issue with any electronics in the system, contact customer support for help resolving the issue. To become more familiar with the MSI scale or system, review all manuals before beginning setup or calibration procedures.

In addition, perform a practice calibration on the system before attempting a full calibration on-site. If your system was factory calibrated, test the current calibration of the system before installation by performing a simulated calibration. A serial cable should be stored at the weighing system site after installation to ease any troubleshooting during future maintenance.

Troubleshooting Tips for Problems During Installation

- If there are installation problems, refer to the optional system schematic for a wiring guide. Check connection points and ensure components are properly grounded.
- If the system has communication errors, review antenna locations to ensure they are within the recommended distance and have no solid objects blocking the transmission. Locate crane remotes, Wi-Fi or WPAN (wireless personal area network) modems and competing RF weighing systems to determine whether these sources may be causing an interference.
- Phone support or an RF site survey may be necessary for persistent issues. To assist with phone support, record all the networks, IDs, serial numbers and print strings associated with the system.
- If problems continue during installation, request on-site support from an MSI product specialist.

Rice Lake offers a comprehensive line of MSI overhead weighing systems, including crane scales, tension dynamometers and integrated solutions. Rental supplies for RF site surveys are also available to assist with product installation and troubleshooting. Live customer support can be reached 24/7 by phone and industry experts are always ready to help with any product questions.

Calibration and Maintenance

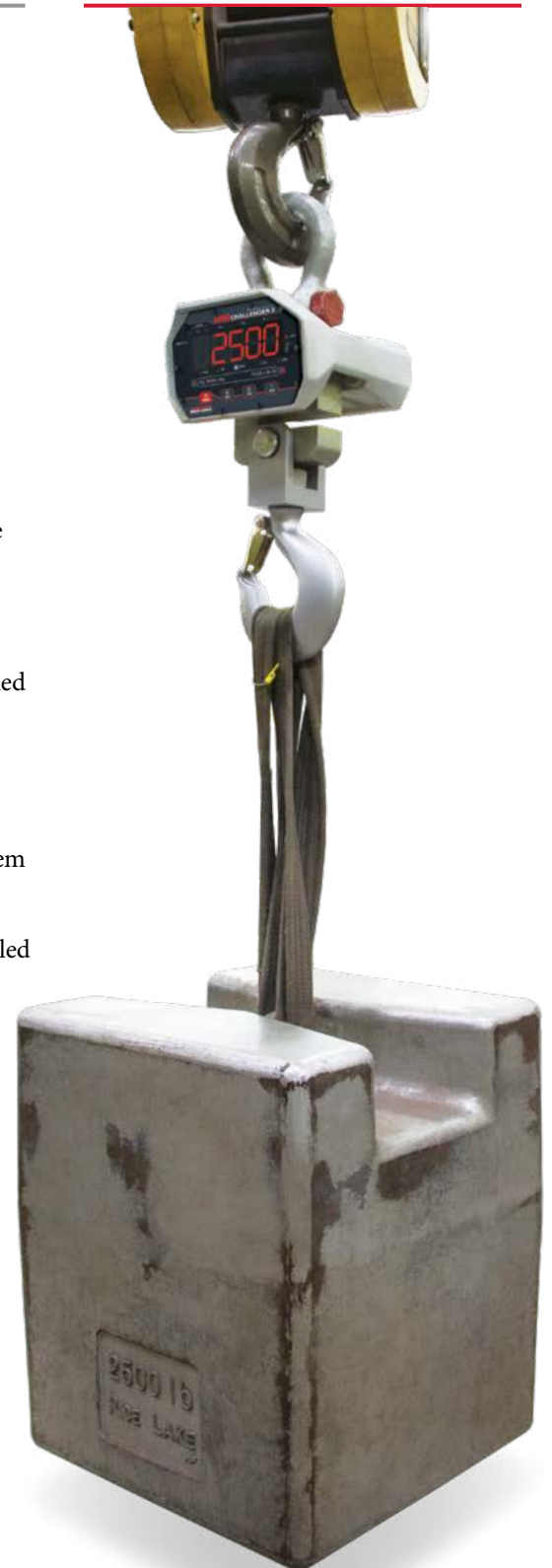
Calibration

Overhead weighing systems should undergo scheduled calibration tests to make sure weight readouts are accurate. This is particularly important for applications where Legal for Trade certification is necessary.

A certified scale dealer will calibrate overhead weighing equipment after installation. If your overhead weighing system is going to provide weight readouts for commerce, the scale will need to have a Legal for Trade approval to ensure the weight is within a certain degree of accuracy. Discuss with your scale supplier if you will need a crane scale that meets Legal for Trade approval, and which approval agencies, such as the National Type Evaluation Program (NTEP), Measurement Canada, or state and local approval agencies, need to provide certification for commerce in your area. The scale's calibration interval is determined by the frequency of use, individual application requirements, and federal, state and local guidelines. Each scale component should be tested and detailed test reports should be provided to the customer and government authorities. After calibration, detailed reports must be provided to weights and measures authorities.

Protective Features and Scheduled Maintenance

Many manufacturers design scales with protective features to reduce the chances of system failure and minimize the amount of maintenance needed. For example, a scale may be built with self-contained protective features to prevent it from being loaded above its rated capacity. Still, inspections of your overhead weighing equipment should be scheduled regularly to make sure your system is running properly.



Glossary

Accuracy

The ability of a scale to measure a known weight value correctly.

Analog to Digital

Conversion of continuously varying (analog) voltage levels to discrete binary-numbered (digital) values (e.g., a load cell output can be fed through an A/D converter to produce a continuous stream of digitized information and sent to a digital indicator).

Calibration

The comparison of load cell outputs against standard test loads.

Capacity

The amount of weight the scale is capable of weighing accurately.

Clamp-on Load Cell

Load cells used for measuring wire rope tension and preventing and detecting overload for overhead cranes and hoists.

Crane Scale

A suspended scale that is used for light-to heavy-capacity overhead weighing.

EX Certification

A document that verifies a piece of equipment, such as scales, are safe to use in explosive environments.

FM (Factory Mutual)

Products with an FM approval indicated the product has been tested and meets rigorous safety and performance standards.

Handbook H-44

A comprehensive set of requirements for weighing and measuring devices that are used in commerce and law enforcement activities; not a federal law, but developed and updated annually by the National Conference on Weights and Measures. Its complete title is "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices."

Indicator/Controller

Indicators function as control devices for overhead weighing systems. They collect the digital weight readout from the scale's load cells and also provide process reports and data.

Integrated Solution

A permanently-installed shear web load cell, clevis load pin or clamp-on load cell used to provide constant load monitoring and prevent overloads.

International Organization of Legal Metrology (OIML)

Treaty organization that recommends technical requirements for weighing and measuring equipment prior to the sale or distribution of a model or type within the state, nation, etc.

Legal for Trade

An industry recognized term to distinguish approval from the appropriate weights and measures regulating authority to use a scale for weight-based transactions and commerce.

Lift and Weigh

Lift and weigh devices are designed for inline weighing where the sample (load being weighed) applies tension to the weighing device.

Lift, Weigh and Move

Lift, weigh and move devices are designed for inline weighing and support moving a sample (load) to a new location.

Linearity

A factor that makes up a scale's accuracy. Linearity is the scale's ability to measure as close to the target weight as possible.

Load Cell

A device that produces an output signal proportional to the applied weight or force.

Load Pin Sensor

A unique, industrial-grade integrated solution that offers safety, strength and corrosion resistance in overhead weighing applications.

Glossary Continued

Maximum Allowable Variation

A deficiency in the weight, measure, or count of an individual package beyond which the deficiency is considered to be an unreasonable error.

Measurement Canada

Measurement Canada inspects measuring devices, such as scales, to ensure they meet required Canadian standards and provides approvals for such devices before they can be used in trade.

National Institute of Standards and Technology (NIST)

An agency within the United States Department of Commerce. NIST regulates measurement in the United States to ensure accurate weight-based commerce. NIST's specifications and requirements for fair and accurate weighing systems are documented in Handbook 44 (H-44).

National Type Evaluation Program (NTEP)

A program of cooperation between the National Conference on Weights and Measures, NIST, state weights and measures officials and the private sector for determining conformance of weighing equipment with the provisions of H-44.

Output

The signal (voltage, current, pressure, etc.) produced by a load cell. Where the output is directly proportional to excitation, the signal must be expressed in terms such as volts per volt, millivolts per volt, or volts per ampere, etc., of excitation.

Remote Display

An instrumentation device for displaying weight data separately from an indicator/controller.

Repeatability

A factor that makes up a scale's accuracy. Repeatability is the scale's ability to measure and display the same weight each time it is tested. Repeatability is measured in standard deviation.

Shear Web Load Cell

An integrated, low-profile load cell that compensates for hook rotation and eliminates headroom loss.

Tare

The weight of an empty container or vehicle, or the allowance or deduction from gross weight made on account thereof.

Tension Link

An integrated solution for cranes designed to provide force measurement for lifted items.

(Tension Link) Dynamometer

An instrument used for measuring vertical and horizontal tension in overhead weighing applications such as rigging, load tests or crane and elevator certification.

Tolerance

A value fixing the limit of allowed departure from the labeled contents, usually presented as a plus (+) and minus (-) value.

Twist Lock Sensor

A durable, accurate SOLAS solution equipped with an internal strain gauge for measuring vertical tension while a crane is under load.

Units

The unit of measure that is to be represented: lb, kg, kN, etc.

Wireless Network Solutions

Used to communicate data between scale electronics.



Rice Lake Weighing Systems has been manufacturing and distributing weight-related products since 1946 and is a global leader in measurement and weighing solutions.

In 2012, Rice Lake acquired Measurement Systems International to better serve our customers with an expanded product offering. MSI has been providing niche weighing technologies worldwide since 1977. Rice Lake's MSI overhead weighing solutions are advanced products designed to meet the unique application requirements of a variety of industries.

Find additional resources at www.ricelake.com/MSI



24/7/365

Emergency Support

We know downtime isn't an option. That's why we have on-call support available nights, weekends and holidays.

New Year's Eve?

We'll answer the call.



Thursday at midnight?

We'll answer the call.

Any time, day or night,
we'll answer the call.

Live support is always available to provide technical assistance or order replacement parts to keep your customers up and running.

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Call 800-472-6703 and press 1 to reach on-call personnel.



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Emergency Contact Information

Call 800-472-6703 and press 1 to reach on-call personnel outside of our normal business hours.

Extended Business Hours

Monday through Friday from 6:30 a.m. to 6:30 p.m.
Saturday from 8:00 a.m. to 12:00 p.m. Central Time

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