GB(X) Analog Scale Base Technical Manual and User's Guide

B15503900A (12/00).00 METTLER TOLEDO is recognized around the world for manufacturing and marketing high quality scales and weighing systems. With roots tracing back to 1901, the company takes pride in its long established record of employing innovation, technology, and a close working relationship with its customers to meet the diverse needs of the global marketplace. METTLER TOLEDO's worldwide headquarters are in Greifensee, Switzerland.

©Mettler-Toledo, Inc. 2000

No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written permission of Mettler-Toledo, Inc.

U.S. Government Restricted Rights: This documentation is furnished with Restricted Rights.



CUSTOMER FEEDBACK

Your feedback is important to us! If you have a problem with this product, or just a suggestion on how we can serve you better, please fill out this form and send it to us. If you are in the United States, you can mail this postpaid form to the address on the reverse, or fax it to (614) 438-4355. If you are outside the United States, please apply the appropriate amount of postage before mailing. You can also send your feedback via email to: <u>guality_feedback.mtwt@mt.com</u>.

Your Name:	Date:
Organization Name:	METTLER TOLEDO Order Number
Address:	Part / Product Name:
	Part / Model Number:
	Serial Number:
Phone Number: () Fax Number: ()	Company Name for Installation:
E-mail Address:	Contact Name:
	Phone Number:

How well did this product meet your expectations in its intended use?	Comments:
Met and exceeded my needs	
Met all needs	
Met most needs	
Met some needs	
Did not meet my needs	

Comments/Questions:

DO NOT WRITE IN SPACE BELOW; FOR METTLER TOLEDO USE ONLY			
Retail RESPONSE: Include Root	Light Industrial	Heavy Industrial	Systems

FOLD THIS FLAP FIRST



NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

FIRST CLASS PERMIT NO. 414 COLUMBUS, OH

POSTAGE WILL BE PAID BY ADDRESSEE

Mettler-Toledo, Inc. Quality Manager - MTWI 1150 Dearborn Drive Worthington, Ohio 43085 USA

hlulullullulululululululululululul

Please seal with tape.

INTRODUCTION

Information regarding METTLER TOLEDO Technical Training may be obtained by writing to:

METTLER TOLEDO 1900 Polaris Parkway Columbus, Ohio 43240 (US and Canada) 614- 438-4511 (All Others) 614-438-4888

FCC Notice

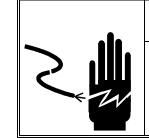
This device complies with Part 15 of the FCC Rules and the Radio Interference Requirements of the Canadian Department of Communications. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR CHANGES WITHOUT NOTICE.

PRECAUTIONS

READ this manual BEFORE operating or servicing this equipment.



WARNING

ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

FOLLOW these instructions carefully.

SAVE this manual for future reference.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.



DISCONNECT ALL POWER TO THIS UNIT BEFORE REMOVING THE FUSE OR SERVICING.

BEFORE CONNECTING/DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS BEFORE ANY CONNECTIONS OR DISCONNECTIONS ARE MADE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT OR BODILY HARM.



OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.



A WARNING!

THE GB15PX, GB30PX, GB60LPX, AND GB150PX ARE APPROVED FOR USE IN HAZARDOUS ENVIRONMENTS. IF YOU PLAN TO USE A GB SCALE IN A HAZARDOUS ENVIRONMENT, THE FACTORY NUMBER MUST HAVE AN "X" IMMEDIATELY FOLLOWING THE "P". ALL OTHER MODELS ARE NOT APPROVED FOR HAZARDOUS ENVIRONMENTS.

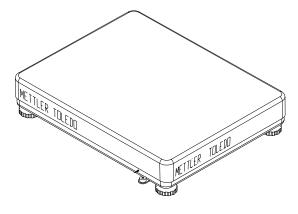
CONTENTS

1	Introduction	
	Model Identification	
	Specifications	
	Options	
	Terminal/Scale Compatibility	
2	Installation	2-1
	Preparation	
	Inspection and Setup	
	Selecting the Location	
	Level the Base	
	Wiring Connections	
	Calibration	
3	Operating Instructions	
4	Service and Maintenance	4-1
	Cleaning and Maintenance	4-1
	Maintenance Reminders	
5	Approval Information	
	Weights and Measures Approval (NTEP)	
	Canadian Standards Association (CSA) Approval	
	Factory Mutual Approval	
	Identification	5-3
	System and Entity Approval	
	Temperature Rating	
6	Parts and Accessories	6-1
	GB15P, GB30P, GB60P Base	6-1
	GB60LP, GB150P Base	6-3

Introduction

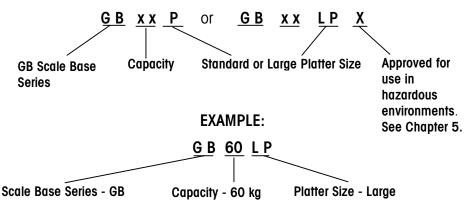
The GB analog scale base is designed for industrial and commercial applications in general purpose (dry) environments. Models are also available for use in hazardous areas. The GB base can be connected with a variety of METTLER TOLEDO terminals, providing maximum flexibility for customizing a system.

This manual provides information for installing, adjusting, and trouble-shooting the GB base. Additional information may be found in the manual(s) for the terminals, which you are connecting to the GB base.



Model Identification

The GB base is available in various capacities. The 60 kg base is also available in two sizes. Refer to the following to identify the GB base model with which you are working.



The example above is not approved for use in a hazardous environment because it lacks an "X" at the end of the model number.

Specifications

Model	GB15P(x)	GB30P(x)	GB60	P(X)	GB60LP	(X)	GB150P(x)
Maximum Capacity	15 kg 30 kg		60 kg		60 kg		150 kg
	30 lb	60 lb	150	150 lb 150 lb		b	300 lb
Readability Non-Legal-for-Trade at	0.001 kg	0.002 kg	0.005	i kg	0.005	kg	0.01 kg
Maximum Capacity	0.002 lb	0.005 lb	0.01	lb	0.01	b	0.02 lb
Recommended Legal-for-Trade Build (NTEP)	10 x 0.002 kg 25 x 0.005 lb	25 x 0.005 kg 50 x 0.01 lb	50 x 0.0 100 x 0		50 x 0.0 100 x 0.0		100 x 0.02 kg 250 x 0.05 lb
Maximum	-	-	101		20 ko		30 kg
Back Weight *	-	-	25	•	50 lb	,	75 lb
Resolution	Up to 5,000) divisions Legal-fo	r-Trade/ Up	to 15,00	00 divisions r	ion-Lega	I-for-Trade
Load Cell Capacity	22 kg 45 kg 100 kg			200 kg			
Dimensions	300 x	400 x 85 mm			400 x 500 x 85 mm		
wxdxh	11.8 :	< 15.8 x 3.4 in			15.8 x	19.7 x 3	3.4 in
Net Weight	11 kg / 23 lb 21 kg / 46 lb				lb		
Shipping Weight	12 kg / 26 lb 23 kg / 50 lb				lb		
Load Cell Cable	2 m / 6 ft 3 m / 10 ft					Ť	
Load Cell Type	Analog 350 ohm 2 mV/V load cell ("x" versions FM and CSA approved)						
Construction	Powder-painted stamped-steel frame / 304 stainless platform						
Operating Temperature		-10°C to 40°C (14°F to 104°F)					
Operating Temperature	10 to 95% humidity, non-condensing						
	NTEP Class III, 5000d, COC# 96-170						
Approvals	Industry Canada, 5000d, AM 5178						
	NSC (Australia), OIML Class III						

*Back weight based on recommended Legal-for-Trade build

Options

The following accessories are available for the GB scale base. Contact your authorized METTLER TOLEDO representative for more information.

- Roller ball platform (for the GB60LP, GB60LPX, GB150P, and GB150PX.)
- Portable stand (carbon steel)

Terminal/Scale Compatibility

The GB scale base can be used with the following METTLER TOLEDO terminals and counting scales:

- HAWK[®] Terminal •
- ID7 Terminal
- JAGUAR[®]/JAGXTREME™ Terminal (with analog option)
- LYNX[®] Terminal •
- LYNXBATCH[®] Batching Controller
- •
- PANTHER[®] (Analog) Terminal PANTHER[®] PLUS (Analog) Terminal
- PUMA[®] Terminal (Refer to Chapter 5, Approval Information)
- SC Counting Scale (with analog second scale kit)
- VIPER Counting Scale (with analog second scale kit)
- 8582 Counting Scale (with analog second scale kit)

NOTES

2 Installation Preparation The GB base is a scale base and does not include a terminal. The appropriate terminal and any accessories will be shipped separately. Verify that required accessories are available before unpacking and installing the base. The GB base should remain in its shipping carton until it reaches the location where it is to be installed for maximum protection during transit. Inspection and Setup Regardless of the GB base model with which you will be working, the following general instructions apply in terms of unpacking and assembling the scale base: In the shipping container showed signs of damage at delivery, file a freight claim with the carrier if necessary. If you have not already done so, remove the base, along with its protective

- If you have not already done so, remove the base, along with its protective covering, from the shipping carton. Note: The GB base ranges in net weight from 12 kg to 23 kg (26 lb to 50 lb), depending on the model number. You may wish to have someone assist you in lifting the scale to avoid personal injury or dropping the scale base.
- Remove the protective covering, using care not to drop the GB base. Store the packaging and carton for future use should you need to transport or ship the GB base.
- Inspect the GB base for damage. Never install a GB base if damage is apparent.
- Make sure all components are included. The GB base should contain:
 - Weighing platform with stainless steel platform and level.
 - Technical Manual and User's Guide
 - Wrench for locking the leveling feet



The GB15PX, GB30PX, GB60LPX, and GB150PX are approved for use in hazardous environments. If you plan to use a GB scale in a hazardous environment, the factory number must have an "X" immediately following the "P". All other models are NOT approved for hazardous environments.

🚺 WARNING!

Selecting the Location

For optimum weighing performance and safety, please keep the following in mind when selecting a location for the GB base:



Never operate the GB base in a hazardous environment unless using one specifically approved for use in hazardous environments. (A GB base approved for use in a hazardous environment will have a model number ending in an "X.")



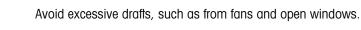
Never use the GB base in wet areas or in environments subjected to washdown with high pressure water.



Select a firm, level, and vibration-free surface on which to place the GB scale base.



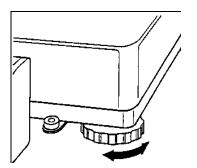
Maintain a temperature range of -10° C to 40° C (-18° F to 104° F). Avoid areas where the temperature is rapidly changing.



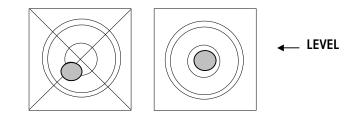
Level the Base

Once the GB base is in place, make sure it is level by performing these steps:

• Turn the leveling feet of the weighing platform until the scale is horizontal. The leveling feet should each touch the surface on which the GB base is placed, and the GB base should not rock or teeter.



Check to make sure the bubble on the level (located on the side of the GB base) is centered as shown here.



• You must re-level the GB base after every location change.

Wiring Connections

To connect the GB base to a terminal, please refer to the technical manual provided with specific terminal or terminal with which you are working, as well as the information below for the METTLER TOLEDO HAWK[®] terminal, ID7 terminal, JAGUAR/JAGXTREME terminal, LYNX terminal, LYNXBATCH[®] batching controller, PANTHER (Analog) terminal, PANTHER[®] PLUS (Analog) terminal, PUMA terminal (Refer to Chapter 5, Approval Information), SC counting scale (with analog second scale kit), VIPER counting scale (with analog second scale kit), and the 8582 counting scale (with analog second scale kit).

WIRE COLOR	SIGNAL DESCRIPTION
GRN	+Signal Output
BLK	-Signal Output
WHT	+Excitation Input
YEL	+Sense Output
RED	-Sense Output
BLU	-Excitation Input
SHIELD	Cable Shield (Tied to chassis)

Calibration

Refer to the calibration procedure outlined in the technical manual for the terminal you are using.

To guarantee reliable service from the GB base, a regular calibration schedule should be implemented. In addition, the base should always be calibrated after repairs of any type are performed. Contact your authorized METTLER TOLEDO representative for more information.

NOTES

3

Operating Instructions

The operating instructions for the GB scale base depend on the terminal with which it is used, as well as on the specific application for which it is being used. Refer to the operating instructions or technical manual for the terminal being used with the GB base.

The following general instructions should be followed for all applications and terminals to ensure the best weighing performance for the scale.

Location.

- The GB base should be placed on a solid surface that is free of excessive vibration and in an area free of drafts and sudden temperature changes.
- The area should be clear of cables, boxes, or anything else that could come in contact with the scale platform. The platform itself should be kept free of dust, dirt, and water.

Accuracy.

For optimum weighing performance, place objects to be weighed towards the center of the platform.

Calibration.

Contact your authorized METTLER TOLEDO representative to arrange scheduled calibration visits by factory-trained service technicians. You may also purchase certified weights from METTLER TOLEDO to perform your own calibration checks.

Shock Loads.

The GB base is designed to withstand overload conditions up to 150% capacity without affecting the scale's weighing performance. However, comparable weights dropped from a distance on to the weighing platform may cause forces far higher than the acceptable overload capacity and damage the GB base's internal components or affect its accuracy. Avoid dropping excessive weight onto the platform.

Large Temperature Fluctuations.

When connected to a METTLER TOLEDO terminal, the GB base automatically compensates for normal changes in ambient temperature. If the scale base is used in areas where large or fast temperature changes occur, weighing accuracy may be affected. In these situations, wait approximately 30 minutes to allow the GB base to adjust to temperature changes before weighing.

Weighing Practices.

- Avoid sliding heavy items across the platform to help prevent scuffing.
- Always use proper lifting devices and practices for loading and unloading the scale. Avoid moving heavy items to the edge of the platform to get a better grip for lifting. Edge loading can tip the platform and lead to personal injury.
- When using the tare function to remove a container's weight from the total weight on the scale, tare each container separately. Variations in materials thickness and other factors can affect the containers' weight.

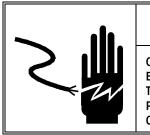
4

Service and Maintenance

Cleaning and Maintenance

Wipe the GB base with a clean, soft cloth that has been dampened with a mild glass cleaner. Do not use any type of industrial solvent such as toluene or isopropanol (IPA) on the frame. Do not use high pressure water.

To clean the terminal or counting scale used with the GB base, refer to the service manual for that specific product.



ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

WARNING

Maintenance Reminders

Calibration tests should be performed any time major mechanical components are replaced or adjusted. The GB base must be re-leveled after any move.

When replacing the load cell, torque the bolts to 150 in. lbs. (16.9 Nm).

NOTES

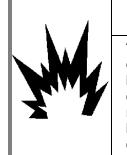
Approval Information

Weights and Measures Approval

The GB scale base is designed to meet or exceed the National Institute of Standards (NIST) Handbook 44 requirements. A certificate of conformance 96-184/96-170 was issued under the National Type Evaluation Program (NTEP) of the National Conference on Weights and Measure.

The GB scale base meets and/or exceeds the Canadian Weights and Measures Laboratories (in Canada) requirements for Class III, 5000d rating. Approval AM 5168/AM-5178 was issued by statutory authority of the Minister of Industry, Science and Technology of Canada.

Canadian Standards Association (CSA) Approval



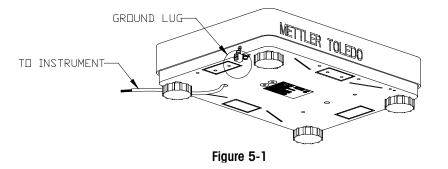
🖄 WARNING!

The GB-X bases are approved for use in hazardous environments <u>only</u> when used in conjunction with and installed per the appropriate Installation (control) drawing(s). Refer to the technical manual supplied with the mating terminal for details. Do not substitute or modify any items on these control drawings. Any modification will void agency approval and could produce a hazardous condition.

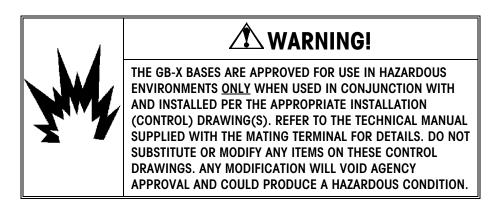
Models GB15PX019, GB30PX019, GB60PX019, GB60LPX019, and GB150PX019 bases have been approved by CSA and are listed on METTLER TOLEDO document 156305R for use in Class I Division 1 & 2 Groups A, B, C, and D Classified locations. This model number will appear as the factory number on the data plate. If the factory number does not have an "X" immediately following the "P", contact your authorized METTLER TOLEDO representative.

The GB-X bases are only approved for use with specific instruments that have been approved by CSA. Refer to the technical manual provided with the instrument for the Control Drawing containing installation and wiring details.

A safety ground must be installed per Canadian Electrical Code 22.1 Appendix F3.2. The safety ground lug extends from the side of the base as shown in Figure 5-1.



Factory Mutual (FM) Approval



The load cells used in models GB15PX, GB30PX, GB60PX, GB60LPX, and GB150PX have been submitted to Factory Mutual and have been issued a Certificate of Compliance as:

IS/I,II,III/1/ABCDEFG/T4 Ta=40°C - 160180R; Entity;

Vmax=25V, Imax=600mA, Pi=1.25W, Ci=0, Li=0;

NI/I/2/ABCD/T6 Ta=40°C;

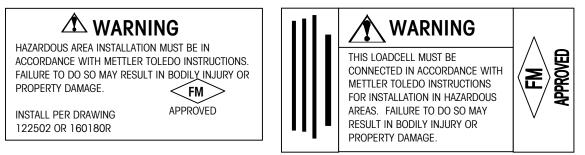
S/II,III/2/FG/T6 Ta=40°C

This indicates an intrinsically safe apparatus for Class I, II and III, Division 1, Group A, B, C, D, E, F and G hazardous (classified) locations in accordance with entity requirements when installed per Control Drawing 160180R; Nonincendive for Class I, Division 2, Groups A, B, C, D; suitable for Class II, III, Division 2, Group F and G hazardous (classified) locations.

A safety ground lug is provided on the bottom of the base in order to properly ground the GB..X scale base when it is used in a hazardous location. Refer to Figure 5-1.

Identification

Confirm that there is a blue label on the load cell cable near the end of the cable indicating "Intrinsic Safe Wiring". In addition, there should be a label on the subplatter or the load cell cable of the GB..X base indicating that it has been approved for use in hazardous areas. The label will look like one of the examples below.



If the GB..X base does not include the approval information as shown in one of the labels above, the base cannot be installed in a hazardous area.

System and Entity Approval

In the past, load cells had been considered a simple apparatus and were submitted with other METTLER TOLEDO devices to obtain a "system" or "loop" approval. METTLER TOLEDO Control Drawing 122502 lists all these load cells and also refers to specific Control Drawings to reference when connecting to other METTLER TOLEDO approved devices. The load cells of the GB..X are included in this listing and the GB..X may be used in these applications. The 122502 Control Drawing is available from METTLER TOLEDO by request.

The most recent approval of the GB..X base provides a separate approval for the load cell (using Entity Values) and adds the ability to connect the GB..X base with other non METTLER TOLEDO approved devices. This approval also includes a certification for use in Division 2 areas with properly approved devices. When Entity Values are used in a Division 2 application, they are referred to as Field Circuit Characteristics. Refer to the 160180R Control Drawing at the end of this chapter for details.

When applying a model GB..X base in a hazardous area using Entity Values or Field Circuit Characteristics, METTLER TOLEDO Control Drawing 160180R must be followed without exception. When using the "system" approval with another METTLER TOLEDO product, Control Drawing 122502 must be followed along with the Control Drawing of the other approved product without exception.





METTLER TOLEDO ASSUMES NO RESPONSIBILITY FOR CORRECT INSTALLATION OF THIS EQUIPMENT WITHIN A HAZARDOUS AREA. THE INSTALLER MUST BE FAMILIAR WITH ALL WIRING AND INSTALLATION REQUIREMENTS.



IN ORDER TO USE THE GB..X BASE IN AN AREA CLASSIFIED AS CLASS I, II OR III, DIVISION 1 OR 2, GROUPS A, B, C, D, F OR G, METTLER TOLEDO CONTROL DRAWING 122502 OR 160180R MUST BE FOLLOWED WITHOUT EXCEPTION. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

Temperature Rating

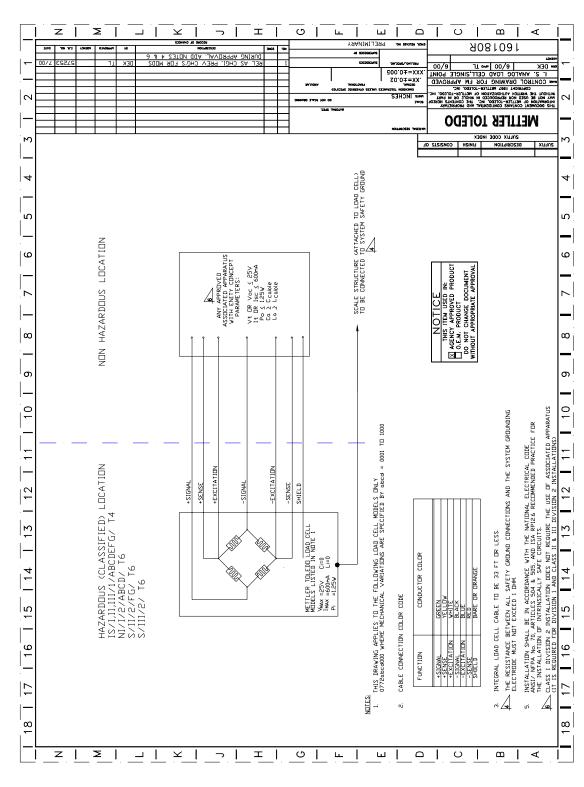
It is very important that the temperature rating of the load cell be appropriate for the environment in which it will be used. The load cells used in the GB..X base have been approved by FM for a temperature rating of T4 (intrinsically safe) and T6 (nonincendive). This indicates that the maximum surface temperature of the load cell under fault conditions will not exceed 135°C (275°F) and under the most unfavorable normal operating conditions will not exceed 85°C (185°F). The Auto Ignition Temperature (AIT) of the hazardous product must be higher than this in order to be safe. If the AIT of the hazardous product is lower than the temperature rating of the load cell (based upon the application), the GB..X base **MUST NOT BE USED** in that environment.



🗥 WARNING

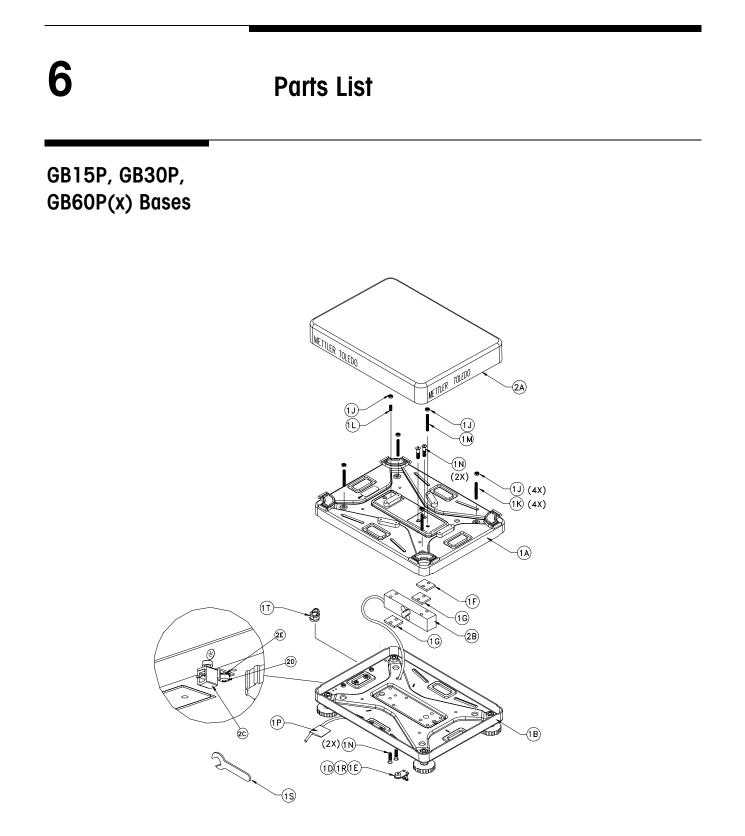
THE LOAD CELL USED IN THE GB..X BASE HAS A TEMPERATURE RATING OF T4 (135° C) WHEN USED IN AN INTRINSICALLY SAFE APPLICATION AND A TEMPERATURE RATING OF T6 (85°C) WHEN USED IN A NONINCENDIVE APPLICATION. THE GB..X BASE MUST NOT BE USED IN AREAS WHERE THE AUTO IGNITION TEMPERATURE OF THE HAZARDOUS MATERIAL IS BELOW THESE RATINGS. Chapter 5: Approval Information Factory Mutual (FM) Approval

Control Drawing



(12/00) 5-5

NOTES



Sym	Qty	Part Number	Description
1A	1	(*)14712500A	Assy, Sub Platter, Med.
1B	1	(*)14712400A	Assy, Base, Med.
1D	1	(*)15262700A	Plate, Bubble Level
1E	1	(*)10268900A	Level
1F	1	(*)13304200A	Spacer .188 (Top)
1G	2	(*)14647700A	Spacer, Load Cell,, 1.5 x 1.0
1H	2	R0506600A	Screw, Tap M4 x 10
1J	6	R0526700A	Nut, M6 (JAM)
1K	4	R0523800A	Set Screw, M6 x 50
1L	1	R0523900A	Set Screw, M6 x 18
1M	1	R0524000A	Set Screw, M6 x 55
1N	4	R0526200A	Screw FH Hex Soc M8 x 30
1P	1	(*)1486700A	Label, Wiring
1S	1	(*)14900800A	Wrench, 17mm
1T	1	(*)14740300A	Strain Relief
2A	1	(*)14608700A	Platter (SS)

GB Standard Siz	e Scale Base	Consists of:	(Common Parts)

	GB15P		
2B	1	(*)14612300A	Load Cell, 22 kg

			GB30P
2B	1	(*)14611500A	Load Cell, 45 kg

			GB60P
2B	1	(*)14611900A	Load Cell, 100 kg

	GB15PX					
2B	1	(*)15180900A	Assy, Load Cell, Intrinsic 22 kg			
**2C	1	(*)09870100A	Terminal, Ground Lug			
**2D	1	R0506600A	Screw, M4-0.7 x 10 PH Taptite			
**2E	1	R0254400A	Washer, Lock, External Tooth #8			

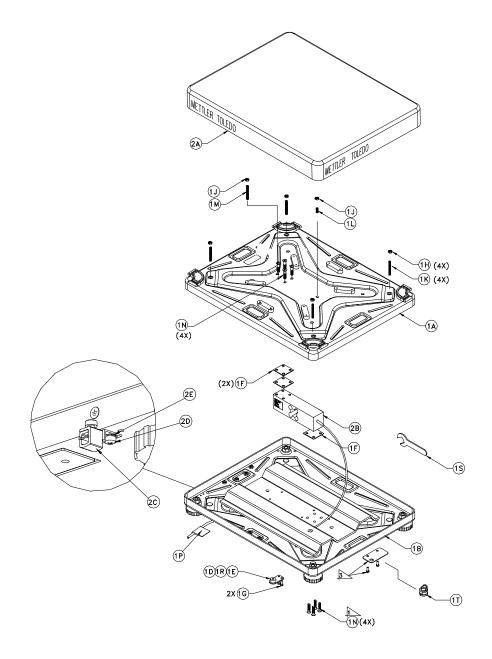
GB30PX					
2B	1	(*)15181000A	Assy, Load Cell, Intrinsic 45 kg		
**2C	1	(*)09870100A	Terminal, Ground Lug		
**2D	1	R0506600A	Screw, M4-0.7 x 10 PH Taptite		
**2E	1	R0254400A	Washer, Lock, External Tooth #8		

	GB60PX					
2B	1	(*)15181100A	Assy, Load Cell, Intrinsic 100 kg			
**2C	1	(*)09870100A	Terminal, Ground Lug			
**2D	1	R0506600A	Screw, M4-0.7 x 10 PH Taptite			
**2E	1	R0254400A	Washer, Lock, External Tooth #8			

(*) May appear with a letter prefix

** CSA and FM Approved models only

GB60LP, GB150P Base



Sym	Qty	Part Number	Description
1A	1	(*)14712700A	Assy Sub Platter Lg
1B	1	(*)14712600A	Assy, Base, Lg
1D	1	(*)15262700A	Plate, Bubble Level
1E	1	(*)10268900A	Level
1F	3	(*)14609700A	Spacer .098 (1 Bottom; 2 Top)
1G	2	R0506600A	Screw, Tap M4 x 10
1H	4	R0524100A	Nut, M8 (JAM)
1J	2	R0526700A	Nut, M6 (JAM)
1K	4	R0524300A	Set Screw, M8 x 1.25 x 63
1L	1	R0526600A	Set Screw, M6 x 16
1M	1	R0524000A	Set Screw, M6 x 55
1N	8	R0524200A	Screw, FH Hex Soc M6 x 30
1P	1	(*)14867000A	Label, Load Cell
1S	1	(*)14900800A	Wrench, 17mm
1T	1	(*)14740300A	Strain Relief
2A	1	(*)14610600A	Platter (SS)

GB Laı	ge Size	Scale	Base	Consists	of:	(Common Parts)	
							-

	GB60LP				
2B	1	(*)14654600A	Load cell, 100 kg		

GB150P					
2B	1	(*)14639000A	Load cell, 200 kg		

	GB60LPX					
2B	1	(*)15181200A	Assy, Load Cell, Intrinsic 100 kg			
**2C	1	(*)09870100A	Terminal, Ground Lug			
**2D	1	R0506600A	Screw M4-0.7 x 10 PH Taptite			
**2E	1	Ro254400A	Washer, Lock, External Tooth #8			

GB150PX					
2B	1	(*)15181300A	Assy, Load Cell, Intrinsic 200 kg		
**2C	1	(*)09870100A	Terminal, Ground Lug		
**2D	1	R0506600A	Screw M4-0.7 x 10 PH Taptite		
**2E	1	Ro254400A	Washer, Lock, External Tooth #8		

(*) May appear with a letter prefix ** CSA and FM Approved models only

 METTLER TOLEDO

 Scales & Systems

 1900 Polaris Parkway

 Columbus, Ohio 43240

 Phone (US and Canada)

 (All Others)

 (All Others)

 Internet:

P/N: B15503900A

(12/00).00

METTLER TOLEDO, JAGUAR[®], LYNX[®], PUMA[®], PANTHER[®], and LYNXBATCH[®] are registered trademarks of Mettler-Toledo, Inc. VIPER and JAGXTREME are trademarks of Mettler-Toledo, Inc. ©2000 Mettler-Toledo, Inc. Printed in U.S.A.

