412587 Indicator
Instruction Manual

Contents subject to change without notice

Version 1.0
Issue AA

<u>VERY IMPORTANT</u>

You are about to replace the indicator on below scales. The new indicator must be set up and calibrated locally in order to function accurately.

Model	Description	Picture
318506	Drum Scale 1,000 lb x 0.5 lb	
244243	Digital Floor Scale 1,000 lb x 0.5 lb	
244244	Digital Floor Scale 2,000 lb x 1 lb	
412581	Stainless Steel Veterinary Scale 1,000 lb x 0.2 lb	
412582	Portable Digital Drum Scale 1,000 lb x 0.2 lb	
412583	Portable Digital Drum Scale 5,000 lb x 1 lb	
412584	Stainless Steel Digital Drum Scale 1,000 lb x 0.2 lb	

To do this, you need three (3) things:

1. The scale's user manual.
2. Accurate test weights (see the CALIBRATION section of the user manual for the quantity of weights necessary) to calibrate the scale.

3. The technical ability to perform the setup of the scale parameters and to do the calibration. If this is a problem, we strongly suggest that you take the new indicator, the scale base, the scale user manual and this indicator manual that you bring all four to your local industrial scale dealer (check with 411 in your area for "scale dealers") and have them perform this task. This work is not covered by any warranty.
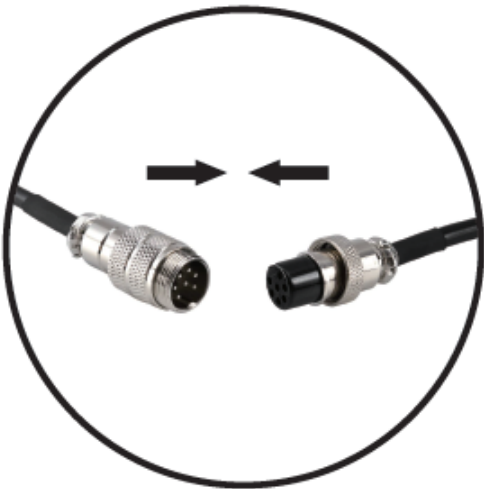
Connect the new indicator to the scale base

This is only a reference scale base picture, your scale base maybe a different one.

Snap-in connector,
DO NOT screw the
male connector into the female one, a
twisting force will cause inside wires to break.

Setup CONFIG parameters in your new indicator

What we will do next is to make sure that the settings of the new indicator are the same as the settings that you see in this chart for **YOUR** scale. Just follow the following instructions, nothing more and nothing less.

Make sure the scale platform is empty and the new indicator is well connected to the scale base.

Turn on the scale by pressing the **ON/OFF** button.

Press and hold the **HOLD/SETUP** button until you see $\mathcal{L}\,o\,\Pi F\,\iota\,\mathcal{L}$.

Press **TARE** (to enter this submenu setting), it says "$o\,\Pi$". Press **TARE** again (to accept this submenu setting).

NOTE: You have successfully entered into the first submenu setting, checked it and if necessary, you have corrected it and have accepted it. All of the others need to be done and it is no harder than what you just did.

NOTE: Remember that in CONFIG MODE,

- the **HOLD/SETUP** key is to return to last submenu;
- the **UNIT/DATA** key is to move once to the right;
- the **PRINT/FUNC** key is to move once up;
- the **ACC/total key** is to move once down;
- the **TARE/PRESET** key is to move once enter and to accept - exit;
- and the **ZERO/ON/OFF** key <u>twice </u>is to EXIT the CONFIG MODE.

Now let's go back to the next submenu item.

Press down key and you will see something that looks like "reset".   The options are "$\mathcal{Y}E\,\mathcal{L}$" or "$\Pi o$" and your scale must say "Πo".   As above, press the TARE key to enter the setting; if it says "Πo" press TARE again to accept/close, if it says "$\mathcal{Y}E\,\mathcal{L}$" use the up or down key until it says "Πo" and then press the TARE key.

Press the down key and you will see something that looks like "regula".   The options are "None", "USA", "CANADA" and "EUROPE". DO NOT ASSUME THAT because you are in the USA for example, that this setting should be USA. Please set the setting for what it says in the column corresponding to your scale model. If it says "None", then set it to "$\Pi o\Pi E$". Press TARE to accept/close.

Press down arrow and do the next one and then the next one and so on until you have done them ALL.

NOTE: If you need to go from submenu 1 to submenu 2 or from submenu 2 to options, press the TARE key.   If you need to go from submenu 2 to submenu 1, use the HOLD/SETUP key. Everything else stays the same.

Once you have done them all, press ZERO/ON/OFF button twice to exit the CONFIG mode. The scale will automatically go to the normal weighing mode.

Below chart shows the CONFIG parameter setting for all the scales that use this indicator, find your scale model and do the settings as the column shows:

CONFIG						
SubMenu1	**SubMenu2**	**Option**	**412581 412582 412584 Setting**	**412583 Setting**	**244243 318506 Setting**	**244244 Setting**
CFG.oN CFG.oFF			*oN*	*oN*	*oN*	*oN*
rESEt		*No* / *YES*	*No*	*No*	*No*	*No*
rEGULA		*NoNE* / *USA* / *CANAdA* / *EUroPE*	*NoNE*	*NoNE*	*NoNE*	*NoNE*
Priñ.N		*100 - 100000*	*5000*	*5000*	*2000*	*2000*
Priñ.d		*0.0001 / 0.0002 / 0.0005 / 0.001 / 0.002 / 0.005 / 0.01 / 0.02 / 0.05 / 0.1 / 0.2 / 0.5 / 1 / 2 / 5 / 10 / 20 / 50*	*0.2*	*1*	*0.5*	*1*
Priñ.Ut		*KG* / *Lb*	*Lb*	*Lb*	*Lb*	*Lb*
SECNd.N		*100 - 125000*	*5000*	*5000*	*2500*	*2000*
ICN.dSP		*No* / *YES*	*No*	*No*	*No*	*No*

SubMenu1	SubMenu2	Option	412581 412582 412584 Setting	412583 Setting	244243 318506 Setting	244244 Setting
̄not ion		1-255	4	4	4	4
o ̄ Er.Ld		0-100	0	0	0	0
Ad.Fro ̄		AdC / Co ̄∃	AdC	AdC	AdC	AdC
Ad.H.SPd		No / YES	No	No	No	No
UN ,tS	ᵏG	YES / No	YES	YES	YES	YES
	Lb	YES / No	YES	YES	YES	YES
	o ̄	YES / No	No	No	No	No
	Lb o ̄	YES / No	No	No	No	No
	G	YES / No	No	No	No	No
∃ro.PNt	, ̄Sn	0-100	100	100	100	100
	,N., ̄Sn	YE ,GHt / CAL. ̄ro / LASt. ̄.t	YE ,GHt	YE ,GHt	YE ,GHt	YE ,GHt

SubMenu 1	SubMenu 2	Option	412581 412582 412584 Setting	412583 Setting	244243 318506 Setting	244244 Setting
ᵹͬᴏ.PΠᵵ	oū.ιℨ5ñ	d5P.oūr	d5P.oūr	d5P.oūr	d5P.oūr	d5P.oūr
		�EιᴅHᵵ				
		ᴄAᴸ.ℨͬo				
		ᴸA5ᵵ.ℨ.ᵵ				
	5Aℨ5ñ	0-100	20	20	20	20
	Aℨ5ñ	0-100	56	56	56	56
FιᴸᵵEr	FᴸᵵΙ.ᵵH	0-255	40	40	40	40
	FᴸᵵΙ.5ᵵ	1-64	8	8	8	8
	Fᴸᵵ2.ᵵH	0-255	8	8	8	8
	Fᴸᵵ2.5ᵵ	0-255	240	240	240	240
FUΠᴄ	Hoᴸd	�E5	�E5	�E5	�E5	�E5
		Πo				
	ᴄoUΠᵵ	�E5	�E5	�E5	�E5	�E5
		Πo				
	PErᴄΠᵵ	Πo	Πo	Πo	Πo	Πo
		100%				
		100.0%				
		100.00%				
	bñι	�E5	Πo	Πo	Πo	Πo
		Πo				

SubMenu 1	SubMenu 2	Option	412581 412582 412584 Setting	412583 Setting	244243 318506 Setting	244244 Setting
FUNC	*ConPAr*	*YES*	*YES*	*YES*	*YES*	*YES*
		No				
	ACCUmU	*No*	*MANUAL*	*MANUAL*	*MANUAL*	*MANUAL*
		MANUAL				
		AUto				
	GEo.CAL	*YES*	*YES*	*YES*	*YES*	*YES*
		No				
	Yt.AdJ	*YES*	*No*	*No*	*No*	*No*
		No				

⚠ **DO NOT change any parameters in other menus except CONFIG !**

CALIBRATION INSTRUCTIONS

Now the scale indicator must be calibrated to the scale base so that the indicator can properly interpret the information that the base is giving it.

For this you will need 2 accurate weights.   If you don't have accurate weights, use another scale and some objects you have in the shop and weigh them.   You need one that is more than 10% of the total capacity.   You need another that is more than the first but less than the total capacity.

Let's use an example.   You have a 440 lb. total capacity scale.   You have a box full of bolts that by using another scale that you believe to be accurate, weighs 56.6 lbs.   You have a bigger box of bolts that weighs 113.7 lbs.   We will use these to calibrate the scale. Your weights might be completely different than this example and that's ok.

Go to section 6 CALIBRATION of the manual. It should be around page 25.

Make sure that the scale platform is empty.

Press and hold the HOLD/SETUP button until you see CONFIG.

Press the down arrow until you see CAL.   Press TARE to enter the CAL (calibration) function.   It should say CAL.ON.   Press TARE again.   It will say "Zero".   Press the down arrow and it will say LINE.   We are now ready to perform a linear calibration of the scale.   The scale will calibrate at 0 lb. (CAL.P0), a calibration with a weight of 10% of full capacity (FS) (CAL.P1) and a calibration with a weight which is more than the CAL.P1 weight but less than FS.

Press TARE and you will briefly see CAL.P0 and then you will see something like 0.00 lb. You have just told the indicator that the empty platform is equal to 0 lb.

Press the TARE key.   You will briefly see CAL.P1 and then you will see a weight appear.

Put your first weight in the center of the scale platform.

As you did above, use the right key to move laterally on the indicator and the up/down keys to change the numbers.   If the scale says kg instead of lb., press and hold the UNIT/DATA key until you see lb.

Change the weight on the indicator to match the weight that you have out on the scale.   (in the example above, this would be 56.6 lbs.)   Once this is done press TARE.

The scale will calculate and then stabilize.   You will see End.Y and the Y will be flashing. Press the down arrow to change this to "No".   Press TARE.

You will briefly see CAL.P2 and then a set of numbers with one flashing.   As above, out the weight in the center of the platform and use the right/left and up/down keys to change the numbers to correspond to the 2nd weight that you have prepared (in the example above 113.7 lb.).

Press TARE.   The scale will calculate and stabilize. If everything went well, you will see CAL.END and the scale will return to normal weighing mode and is ready for daily use.

If at any point you saw CAL.Er, this means that there was an error.   Press ZERO/ON/OFF twice to exit CAL mode and start over.   Make sure that your 1st weight is more than 10% of FS and that the 2nd weight is more than the first one but less than 100% of FS.