

# Section B

12/2002

# Ford Inside Meter Settings



**The Ford Meter Box Co., Inc.** 775 Manchester Avenue, P.O. Box 443, Wabash, Indiana, USA 46992-0443  
Telephone: 260/563-3171 FAX: 1-800-826-3487 Overseas FAX: 260/563-0167 <http://www.fordmeterbox.com>

# Contents

	Page
<b>Inside Setting Applications, Benefits and Installation Guidelines</b> . . . . .	3
<b>Inside Settings for new installations</b>	
Copperhorns . . . . .	4 & 5
Valve Copperhorns . . . . .	6
Plumbhorns . . . . .	7
Handyhorns . . . . .	7
<b>Inside Settings for existing services</b>	
Kornerhorns . . . . .	8-10
Kornerhorns with Integral Valves . . . . .	10
Pack Joint Assemblies for Kornerhorns . . . . .	11
Pack Joint Ell Assemblies for Kornerhorns . . . . .	11
Pretzelhorns . . . . .	12
Drophorns . . . . .	13
Basement Resetters . . . . .	14
<b>Inside Settings for Special applications</b>	
Style A & B Wall Setters . . . . .	15
<b>Warranty</b> . . . . .	16

---

## FORD INSIDE SETTINGS MEET ALL WATER METER INSTALLATION REQUIREMENTS WITH THREE BASIC DESIGN APPLICATIONS.



1. Inside Settings  
for **new installations**



2. Inside Settings for use with  
**existing service line**  
installations



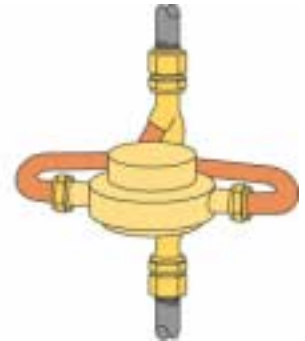
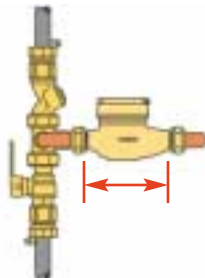
3. Settings for **special**  
**applications**. Please call  
or write describing your  
special application.

All Ford 5/8", 5/8"x3/4" and 3/4" Inside Meter Setters are manufactured with 13/16" O.D. copper; 1" Setters are manufactured with 1-1/8" O.D. copper.

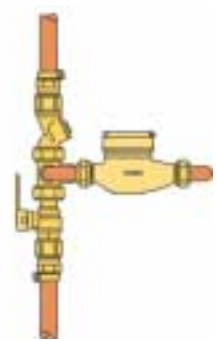
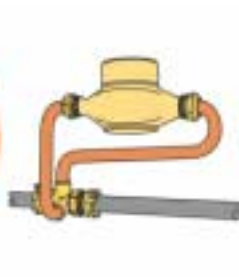
# Information

## FORD INSIDE METER SETTINGS SAVE MONEY IN THE LONG RUN

All Ford Inside Meter Setting Devices, while adding a small initial cost to meter installation, provide the following long-term cost saving advantages.



1. **Ford Inside Setters automatically ensure proper spacing for the meter** – speeding meter changeouts.
2. **Ford Inside Setters position the meter in the correct (upright and horizontal) plane** – reducing meter wear and loss of accuracy.



3. **Ford Inside Setters protect the meter from pipe strain** – essential when using meters with non-metallic cases.
4. **Ford Inside Meter Settings provide permanent electrical bonding** – no need for a separate bonding strap.

In addition, Ford Inside Meter Setters cut the amount of time necessary to install the meter, thus saving a considerable amount of labor cost.

## GUIDELINES TO FOLLOW WHEN INSTALLING INSIDE METER SETTINGS

1. The meter should be located as near as possible to the point of entry of the supply line, to discourage hidden connections ahead of the meter.
2. The meter should be located so that it is safe from freezing and accessible for reading, inspection and changing. Even remote reading meters must be inspected and maintained.
3. The meter should be from two to four feet above the floor, with the dial pointing up. Meters are more accurate in this position.
4. Valves should be located just ahead of the meter and just after the meter to prevent backflow and pipe drainage during meter changeouts. A quality Ford Check Valve or Dual Check Valve may be substituted for the outlet valve. The type and quality of valve or valves is important. Points to consider are low pressure loss, freedom from leakage and ease of operation. Ford Ball Valves provide all of these advantages and may be used with any Ford inside setting device.
5. A well-designed meter holding device, such as a Ford Inside Setter, is a great advantage in physically connecting and supporting the customer's piping, making meter changes easier and more trouble-free and providing an electrical bond around the meter. Ford Setters are well worth the slight additional initial cost.

All solder joints on Ford Inside Setters are made with **lead-free solder**.

# Copperhorns - *For metering new services*

Designed for use with new installations, the Copperhorn is our most popular inside setter for these very good reasons.

1. **The Copperhorn is easy to install** and eliminates ordinary meter couplings and many pipe fittings and joints.
2. **Pressure loss is negligible** due to smooth, full diameter bends in the copper tubing.



Water passages of copper tubing are held in place by solid 85-5-5-5 brass pieces.



3. **Meters can be changed easily** without disturbing the customer's plumbing.
4. **The Copperhorn makes for an attractive, professional-looking installation** which does not detract from the appearance of finished basements or utility rooms.
5. **The Copperhorn fits into any metering program** and can be fitted with a ball valve inlet and/or check valve outlet connection.

The Copperhorn can be adapted to most inside meter setting situations. Pipe ends or swivels are available for many types of connections and in a wide range of sizes as listed below.

## Copperhorn for 5/8" meter

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	ONE END	OTHER END		
CH11-111	1/2" Female Iron Pipe	1/2" Female Iron Pipe	3.1	10
CH11-133	3/4" Female Iron Pipe	3/4" Female Iron Pipe	3.1	10
CH11-133-LS	Less Swivel w/Union Nut	Less Swivel w/Union Nut	3.0	10
CH11-144	1" Female Iron Pipe	1" Female Iron Pipe	3.1	10
CH18-111	1/2" Female Iron Pipe	1/2" Male Iron Pipe	3.1	10
CH18-133	3/4" Female Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH18-134	3/4" Female Iron Pipe	1" Male Iron Pipe	3.1	10
CH18-143	1" Female Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH18-144	1" Female Iron Pipe	1" Male Iron Pipe	3.1	10
CH22-133	3/4" Flared Copper	3/4" Flared Copper	3.1	10
CH84-133	3/4" Male Iron Pipe	3/4" Pack Joint CTS*	3.1	10
CH88-133	3/4" Male Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH88-143	1" Male Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH88-144	1" Male Iron Pipe	1" Male Iron Pipe	3.1	10
CH8S-133	3/4" Male Iron Pipe	3/4" Solder	3.1	10
CHSS-133	3/4" Solder	3/4" Solder	3.1	10
CHSS-144	1" Solder	1" Solder	3.1	10



No. 1 Copperhorn with 3/4" Female Iron Pipe inlet and outlet

## Copperhorn for 5/8"x 3/4" meter

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	ONE END	OTHER END		
CH11-211	1/2" Female Iron Pipe	1/2" Female Iron Pipe	3.1	10
CH11-233	3/4" Female Iron Pipe	3/4" Female Iron Pipe	3.1	10
CH11-233-LS	Less Swivel w/Union Nut	Less Swivel w/Union Nut	3.0	10
CH11-243	1" Female Iron Pipe	3/4" Female Iron Pipe	3.1	10
CH11-244	1" Female Iron Pipe	1" Female Iron Pipe	3.1	10
CH18-211	1/2" Female Iron Pipe	1/2" Male Iron Pipe	3.1	10
CH18-233	3/4" Female Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH18-234	3/4" Female Iron Pipe	1" Male Iron Pipe	3.1	10
CH18-243	1" Female Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH18-244	1" Female Iron Pipe	1" Male Iron Pipe	3.1	10
CH22-233	3/4" Flared Copper	3/4" Flared Copper	3.1	10
CH44-233	3/4" Pack Joint CTS*	3/4" Pack Joint CTS*	3.1	10
CH88-233	3/4" Male Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH88-243	1" Male Iron Pipe	3/4" Male Iron Pipe	3.1	10
CH88-244	1" Male Iron Pipe	1" Male Iron Pipe	3.1	10
CH8S-233	3/4" Male Iron Pipe	3/4" Solder	3.1	10
CH8S-243	1" Male Iron Pipe	3/4" Solder	3.1	10
CHSS-211	1/2" Solder	1/2" Solder	3.1	10
CHSS-233	3/4" Solder	3/4" Solder	3.1	10
CHSS-244	1" Solder	1" Solder	3.1	10



No. 2 Copperhorn with optional HHSCH8-333 3/4" Straight Accessible Dual Check Valve

\* **Grip Joint** for CTS (3/4") can be ordered by adding "-G" to the catalog number.

# Copperhorns - *For metering new services*

## Copperhorn for 3/4" meter



No. 3 Copperhorn with 3/4" Female Iron Pipe inlet and outlet

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	ONE END	OTHER END		
CH11-311	1/2" Female Iron Pipe	1/2" Female Iron Pipe	3.3	10
CH11-333	3/4" Female Iron Pipe	3/4" Female Iron Pipe	3.3	10
CH11-333LS	Less Swivel w/Union Nut	Less Swivel w/Union Nut	3.2	10
CH11-343	1" Female Iron Pipe	3/4" Female Iron Pipe	3.3	10
CH11-344	1" Female Iron Pipe	1" Female Iron Pipe	3.3	10
CH18-333	3/4" Female Iron Pipe	3/4" Male Iron Pipe	3.3	10
CH18-334	3/4" Female Iron Pipe	1" Male Iron Pipe	3.3	10
CH18-344	1" Female Iron Pipe	1" Male Iron Pipe	3.3	10
CH1S-344	1" Female Iron Pipe	1" Solder	3.3	10
CH22-333	3/4" Flared Copper	3/4" Flared Copper	3.3	10
CH44-333	3/4" Pack Joint CTS*	3/4" Pack Joint CTS*	3.3	10
CH82-333	3/4" Male Iron Pipe	3/4" Flared Copper	3.3	10
CH88-333	3/4" Male Iron Pipe	3/4" Male Iron Pipe	3.3	10
CH88-343	1" Male Iron Pipe	3/4" Male Iron Pipe	3.3	10
CH88-344	1" Male Iron Pipe	1" Male Iron Pipe	3.3	10
CH8S-333	3/4" Male Iron Pipe	3/4" Solder	3.3	10
CHSS-333	3/4" Solder	3/4" Solder	3.3	10
CHSS-343	1" Solder	3/4" Solder	3.3	10
CHSS-344	1" Solder	1" Solder	3.3	10

## Copperhorn for 1" meter



No. 4 Copperhorn with 1" Female Iron Pipe inlet and outlet

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	ONE END	OTHER END		
CH11-444	1" Female Iron Pipe	1" Female Iron Pipe	6.1	5
CH11-444-LS	Less Swivel w/Union Nut	Less Swivel w/Union Nut	5.9	5
CH11-455	1-1/4" Female Iron Pipe	1-1/4" Female Iron Pipe	6.1	5
CH18-444	1" Female Iron Pipe	1" Male Iron Pipe	6.1	5
CH1S-444	1" Female Iron Pipe	1" Solder	6.1	5
CH88-444	1" Male Iron Pipe	1" Male Iron Pipe	6.1	5
CH88-454	1-1/4" Male Iron Pipe	1" Male Iron Pipe	6.1	5
CH88-455	1-1/4" Male Iron Pipe	1-1/4" Male Iron Pipe	6.1	5
CH8S-444	1" Male Iron Pipe	1" Solder	6.1	5
CHSS-444	1" Solder	1" Solder	6.1	5

NOTE: 1" Copperhorns have a solid brass body with soldered copper arms.

## Parts for Copperhorn for 5/8", 5/8" x 3/4" and 3/4" meters

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.
CSUN-3	Union Nut only	.25
CHS8-31	1/2" Male Swivel only	.15
CHS1-31	1/2" Female Swivel only	.15
CHSS-31	1/2" Solder Swivel only	.15
CHS8-33	3/4" Male Swivel only	.20
CHS1-33	3/4" Female Swivel only	.20
CHSS-33	3/4" Solder Swivel only	.20
CHS8-34	1" Male Swivel only	.20
CHSS-34	1" Solder Swivel only	.20
CHSUN1-34	1" Female Swivel with Union Nut (assembly)	1.0
CHS2-33	3/4" Swivel and Flare Nut for flared copper connection (less Union Nut)	1.0
CHS4-33	3/4" CTS Pack Joint Swivel (less Union Nut)*	1.0
WR-3	3/4" Wedding Ring only	0.4
HHSCH8-333	3/4" Dual Check Valve with Copperhorn Union Swivel Inlet and 3/4" MIP Outlet (unit attaches directly to Copperhorn body)	2.0

## Parts for Copperhorn for 1" meter

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.
CSUN-4	Union Nut only	.40
CSS8-44	1" Male Swivel only	.30
CSS1-44	1" Female Swivel only	.30
CSSS-44	1" Solder Swivel only	.30
CSS8-45	1-1/4" Male Swivel only	.70
CSSUN1-45-AWT	1-1/4" Female Swivel with Union Nut (assembly)	1.5
WR-4	1" Wedding Ring only	.05
CSA4-44-Q	1" Quick Joint (CTS) Adapter (non swivel)	-

# Valve Copperhorns - *For metering new services*

The Valve Copperhorn is a desirable meter setting when it is advantageous to have a convenient and easily operated valve for customer use. The Valve Copperhorn incorporates a high-quality compression valve as an integral part of the setter body and can be used as an inlet valve or an outlet valve, depending on how the setter is installed.

Valve Copperhorns are made in three meter sizes, as listed below.



**Valve Copperhorn for 5/8" meter**

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	ONE END	VALVE END		
VCH11-133	3/4" Double Purpose	3/4" Double Purpose	4.3	10
VCH18-133	3/4" Double Purpose	3/4" Male Iron Pipe	4.3	10
VCH81-133	3/4" Male Iron Pipe	3/4" Double Purpose	4.3	10
VCHSS-133	3/4" Solder	3/4" Solder	4.3	10

**Valve Copperhorn for 5/8" x 3/4" meter**

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	ONE END	VALVE END		
VCH11-211	1/2" Female Iron Pipe	1/2" Female Iron Pipe	4.3	10
VCH11-233	3/4" Double Purpose	3/4" Double Purpose	4.3	10
VCH11-233-LS	Less Swivel w/Nut	Less Swivel w/Nut	4.2	10
VCH18-233	3/4" Double Purpose	3/4" Male Iron Pipe	4.3	10
VCH18-234	3/4" Double Purpose	1" Male Iron Pipe	4.3	10
VCH88-233	3/4" Male Iron Pipe	3/4" Male Iron Pipe	4.3	10
VCH88-243	1" Male Iron Pipe	3/4" Male Iron Pipe	4.3	10
VCH88-244	1" Male Iron Pipe	1" Male Iron Pipe	4.3	10
VCHSS-233	3/4" Solder	3/4" Solder	4.3	10

**Valve Copperhorn for 3/4" meter**

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	ONE END	VALVE END		
VCH11-333	3/4" Double Purpose	3/4" Double Purpose	4.6	10
VCHSS-333	3/4" Solder	3/4" Solder	4.6	10

**Parts for Valve Copperhorns**

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.
CSUN-3	Union Nut only	.25
CSS8-31	1/2" Male Swivel only	.15
CSS1-31	1/2" Female Swivel only	.15
CSS8-33	3/4" Male Swivel only	.20
CSS1-33	3/4" Female Swivel only	.20
CSSS-33	3/4" Solder Swivel only	.20
CSS4-33	3/4" CTS Pack Joint Swivel (less Union Nut)*	1.0
CSSUN4-33-Q	3/4" CTS Quick Joint Swivel and Union Nut Assembly with Quick Joint Nut	1.2
CSSUN4-34-Q	1" CTS Quick Joint Swivel and Union Nut Assembly with Quick Joint Nut	-
CSS8-34	1" Male Swivel only	.20
CSSS-34	1" Solder Swivel only	.20
CSSUN1-34	1" Female Swivel and Union Nut Assembly	.20
HHSCS8-333	3/4" Dual Check Valve with Valve Copperhorn Union Swivel Inlet and 3/4" MIP Outlet (unit attaches directly to Copperhorn body)	2.0
CSA4-33-Q	3/4" CTS Quick Joint Adapter for 3/4" Double Purpose Nose (non swivel)	1.0

\* **Grip Joint** for CTS (3/4") can be ordered by adding "-G" to the catalog number.



# Plumbhorns - *For metering new services*

The Ford Plumbhorn is a simple, inexpensive meter setting device which can save the cost of ordinary meter couplings, ells, nipples and pipe joints. As with all Ford setters, the Plumbhorn provides correct meter spacing, alignment, and becomes a permanent part of the plumbing when installed in a vertical pipe.

Each end of the Plumbhorn body has 3/4" male pipe threads for a variety of couplings, valves and check valves. The overall body length is 3-1/16".



CATALOG NUMBER	METER SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
PB-1	5/8"	2.0	10
PB-2	5/8"x3/4"	2.1	10
PB-3	3/4"	—	—

## Handyhorns - *For metering new or existing services* *(Setters with Integral Inlet - Outlet Pack Joint Connections)*

The Ford Handyhorn is an inside meter setting device with integral Pack Joint connections. It is designed to be installed in vertical basement or utility room piping and can be used in new plumbing installations or in existing service lines. Pack Joints eliminate the need to thread, flare or solder pipe but do require that the pipe be shifted out of alignment slightly when installed in existing lines.

***Before ordering Handyhorns for meter installations in existing lines, it is essential that a careful survey be made of the types and sizes of piping to be encountered.*** This is of importance because the Pack Joints on each fitting are for the size and type of pipe specified on the order and cannot be adapted to anything else. This is different from the Pack Joints on Ford Kornerhorns (see pages 8 - 11) which are interchangeable and allow the Kornerhorn to be used with a wide variety of pipe and tubing.



CATALOG NUMBER	METER SIZE	SIZE AND TYPE OF EXISTING PIPE	APPROX. WT. LBS.	STD. PKG. QTY.
HH1-15	5/8"	1/2" Iron Pipe	2.3	10
HH1-35	5/8"	3/4" Iron Pipe	2.4	10
◆ HH1-14	5/8"	1/2" Copper Tubing	2.3	10
◆ HH1-34	5/8"	3/4" Copper Tubing*	2.4	10
HH2-15	5/8"x3/4"	1/2" Iron Pipe	2.4	10
HH2-35	5/8"x3/4"	3/4" Iron Pipe	2.5	10
◆ HH2-14	5/8"x3/4"	1/2" Copper Tubing	2.4	10
◆ HH2-34	5/8"x3/4"	3/4" Copper Tubing*	2.5	10
HH3-35	3/4"	3/4" Iron Pipe	2.7	10
HH3-34	3/4"	3/4" Copper Tubing*	2.7	10

\* **Grip Joint** for CTS (3/4") can be ordered by adding "-G" to the catalog number.

◆ **Quick Joint** can be ordered by adding "-Q" to this catalog number.

# Kornerhorns - *For metering existing services*

**When installing meters in existing service lines, the Ford Kornerhorn is the setter of choice.**

Over the last 60 years, thousands of installations in hundreds of metering programs have proven that the Kornerhorn saves time and money when setting water meters in basements and utility rooms.



**The heart of the Kornerhorn system is the removable Pack Joint Assembly.**

Using these removable Pack Joint Assemblies, any Kornerhorn can be adapted to connect to iron pipe, copper tubing or plastic pipe, with no threading, flaring or soldering. Little or no changes need to be made in customer's plumbing. Meter couplings, pipe fittings, and electrical bonding devices are not required. Electrical bonding is achieved through the clamping/set screw mechanism of the Pack Joint nut or the gripper ring of the Grip Joint nut.



PJA4-13 removable Pack Joint Assembly for Copper or Plastic Tubing.



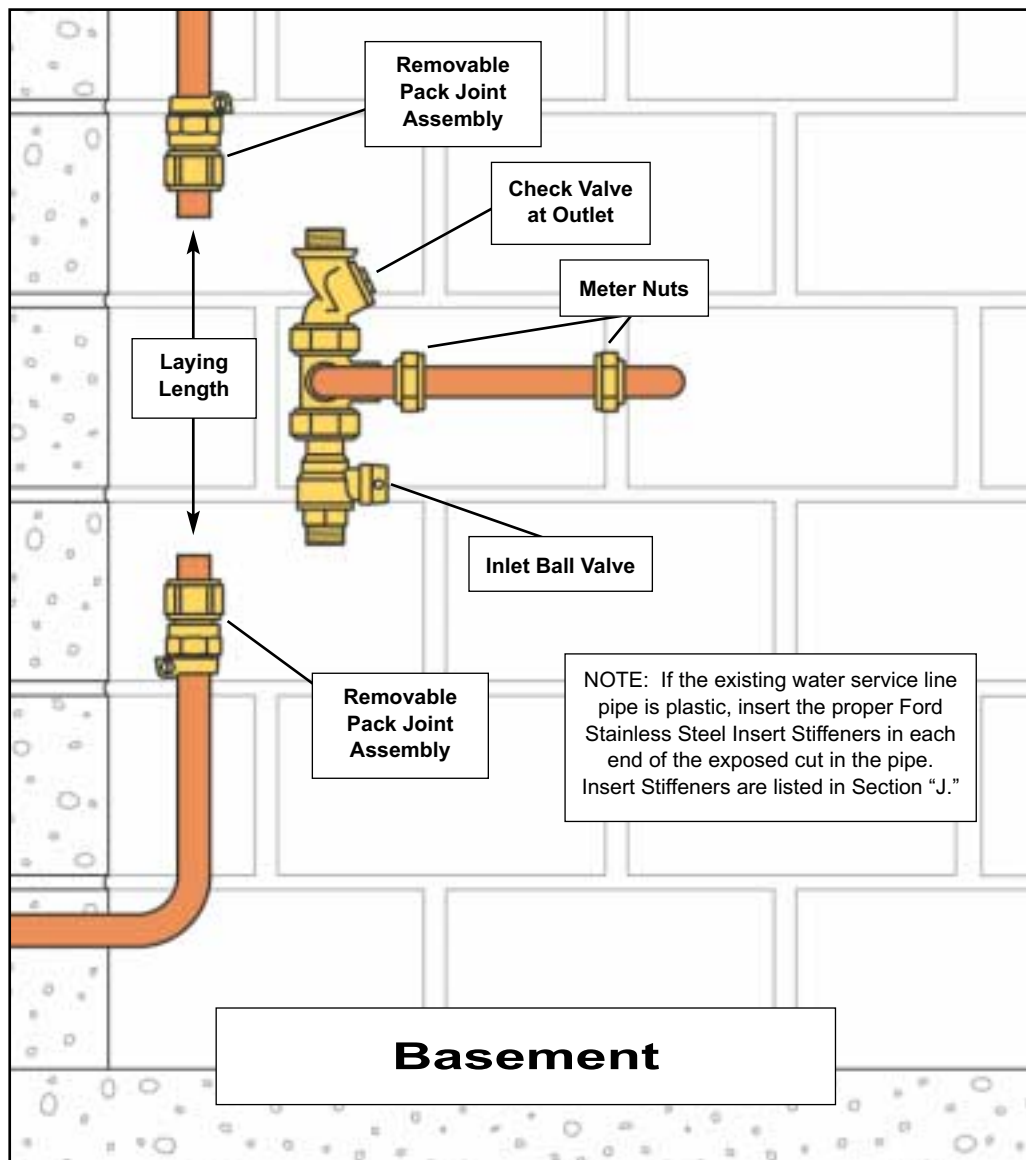
PJA5-13 removable Pack Joint Assembly for Iron Pipe.

**The Kornerhorn is adaptable.**

The Kornerhorn can position the water meter properly/horizontally in a vertical pipe and, if necessary, in close quarters, such as in the corner of a basement or utility room. It can also position the meter properly in horizontal or sloping pipe. **The interchangeable Pack Joint Assembly System eliminates the usual pipe survey prior to the meter installation.** Kornerhorn Inside Setters can be ordered in a quantity sufficient to complete the job along with a small representative number of Pack Joint Assemblies. As the job progresses, experience will dictate the approximate quantity of each type of Pack Joint necessary to complete the job and they can be ordered at a later date. The available types of Pack Joint Assemblies for almost all types of water piping material are shown in the tables on page 11. A variety of detachable and integral valves are available as listed on page 10.



## *For metering existing services* - Kornerhorns



### **With a Kornerhorn, meters can be installed in most locations in a matter of minutes.**

If conditions permit, the meter should be set from two to four feet above the floor. The pipe should be cleaned using a file or coarse emery cloth on iron pipe, or steel wool on copper tubing.

1. Cut out a section of the pipe the total length of the Kornerhorn body plus accessory valves or check valves. The exposed ends should be scraped and filed to remove burrs.
2. The removable Pack Joint Assemblies are slipped onto the pipe ends as shown in the drawing.
3. If the water service line is plastic pipe or tubing, insert the required Insert Stiffeners.
4. The Kornerhorn body, with optional valves attached, is now inserted in the space between the pipes. The Pack Joint Assemblies are slipped along the pipes and screwed tightly onto the body. The Pack Joint nuts are then tightened and locked onto the pipes with setscrews or clamp screws. The Kornerhorn is now a part of the basement piping structure and, when metal pipe is used, electrical bonding is provided for grounding currents.
5. After installation is made, the pipe should be flushed to wash out pipe scale and chips. The meter is then connected to the Kornerhorn in a horizontal position, with the dial facing upward.

# Kornerhorns - *For metering existing services*



KH-2 Kornerhorn

## Kornerhorns Only

CATALOG NUMBER	METER SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
KH-1	5/8"	2.0	25
KH-2	5/8"x3/4"	2.1	25
KH-3	3/4"	2.2	20
KH-4	1"	4.3	5

## Detachable Valves for KH-1, KH-2 AND KH-3 Kornerhorns

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.	STD. PKG. QTY.
KH-VALVE-1	Compression Kornerhorn Valve	1.3	6
KH-VALVE-1D	Compression Kornerhorn Valve with drain	1.5	6
KHBV-1	5/8" Kornerhorn Ball Valve	1.5	10
KHBV-1-D	5/8" Kornerhorn Ball Valve with drain	1.6	-
KHBV-1-HB-2	5/8" Kornerhorn Ball Valve with HB-2 handle	1.7	8
KHCV-1	Kornerhorn Check Valve	1.3	10
KHHCV-1	Kornerhorn Dual Check Valve	-	-
KHHCV-1D	Kornerhorn Dual Check Valve with drain	1.9	6
KH-HHCH-1	In-Line Accessible Cartridge Style Kornerhorn Dual Check Valve	2.0	4
KH-HHCH-1D	In-Line Accessible Cartridge Style Kornerhorn Dual Check Valve with drain	-	-



KH-2 Kornerhorn shown with Detachable Ball Valve, Dual Check Valve and Pack Joint Assemblies

## Detachable Valves for KH-4 Kornerhorn

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.	STD. PKG. QTY.
KH-VALVE-4	1" Kornerhorn Compression Valve	2.3	4
KH-VALVE-4D	1" Kornerhorn Compression Valve with drain	2.4	4
B81-455	1" Kornerhorn Ball Valve	3.7	-
B81-455-HB-34	1" Kornerhorn Ball Valve with HB-34 Handle	4.0	-

**NOTE:** Detachable items will ship packaged separately.

## Kornerhorns With Integral Valves



KHVBHH-2 Kornerhorn with Integral Angle Ball Valve and Angle Dual Check Valve

CATALOG NUMBER METER SIZE & VALVE TYPE		DESCRIPTION		APPROX. WT. LBS.
5/8"	5/8"x3/4"	INLET VALVE	OUTLET VALVE	
KHVB-1	KHVB-2	Ball	None	3.0
KHVBH-1	KHVBH-2	Ball	Single Check	3.8
KHVBHH-1	KHVBHH-2	Ball	Dual Check	4.2
KHVBHC-1	KHVBHC-2	Ball	Dual Cartridge Check	4.4
KHH-1	KHH-2	None	Single Check	3.3
KHHH-1	KHHH-2	None	Dual Check	3.6
KHHC-1	KHHC-2	None	Dual Cartridge Check	3.8

**Note:** The inlet operating valve, on single valve units, is assembled on the short tube unless otherwise specified. This configuration will place the meter to the left of the plumbing as water flows up into the Kornerhorn. Units with a check valve are assembled with the check valve on the short tube unless otherwise specified. This configuration will place the meter to the right of the plumbing as water flows up into the Kornerhorn.

Catalog Section I describes Single, Dual and Cartridge Style Dual Check Valves.

# For metering existing services - Kornerhorns

## Pack Joint Assemblies for KH-1, KH-2 and KH-3 Kornerhorns (two required per Kornerhorn)



CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	SIZE AND TYPE OF EXISTING PIPE	PACK JOINT ASSEMBLY REQUIRED		
◆ PJA4-11	1/2" Copper or Plastic Tube	1/2" P. J. for Pack Joint (CTS)	.5	25
◆ PJA4-13	3/4" Copper or Plastic Tube	3/4" P. J. for (CTS)*	.5	25
PJA4-14	1" Copper or Plastic Tube	1" P. J. for (CTS)*	.9	15
PJA4-15	1-1/4" Copper or Plastic Tube	1-1/4" P. J. for (CTS)	1.2	10
† PJA4-16-AWT	1-1/2" Copper or Plastic Tube	1-1/2" P. J. for (CTS)	2.2	4
PJA5-11	1/2" Iron Pipe	1/2" P. J. for Iron Pipe	.5	30
PJA5-13	3/4" Iron Pipe	3/4" P. J. for Iron Pipe	.5	25
PJA5-14	1" Iron Pipe	1" P. J. for Iron Pipe	1.0	10
PJA5-15	1-1/4" Iron Pipe	1-1/4" P. J. for Iron Pipe	1.7	6
† PJA5-16-AWT	1-1/2" Iron Pipe	1-1/2" P. J. for Iron Pipe	2.3	6
PJA6-13	3/4" Polyethylene Pipe	3/4" P. J. for P.E. Pipe*	.6	20
PJA6-14	1" Polyethylene Pipe	1" P. J. for P.E. Pipe*	1.2	10
† PJA6-15-AWT	1-1/4" Polyethylene Pipe	1-1/4" P. J. for P.E. Pipe	-	4
† PJA6-16-IDR7-AWT	1-1/2" Polyethylene Pipe	1-1/2" P. J. for P.E. Pipe	3.2	-
PJA7-11	1/2" PVC Pipe	1/2" PVC Pipe	-	-
PJA7-13	3/4" PVC Pipe	3/4" P. J. for PVC Pipe	.6	20
PJA7-14	1" PVC Pipe	1" P. J. for PVC Pipe	1.3	10
PJA7-15	1-1/4" PVC Pipe	1-1/4" P. J. for PVC Pipe	1.8	1
† PJA7-16-AWT	1-1/2" PVC Pipe	1-1/2" P. J. for PVC Pipe	2.3	1

\* **Grip Joint** for CTS and PEP (3/4" & 1") can be ordered by adding "-G" to the catalog number.

◆ **Quick Joint** can be ordered by adding "-Q" to this catalog number.

† **NOTE:** These Items are not one piece but are two adapter pieces assembled water tight.

## Pack Joint Assemblies for KH-4 Kornerhorn (two required per Kornerhorn)



CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	SIZE AND TYPE OF EXISTING PIPE	P.J. ASSEMBLY REQUIRED		
◆ PJA4-44-C14-54	1" Copper or Plastic Tube	1" P. J. for (CTS)*	.8	12
PJA4-45	1-1/4" Copper or Plastic Tube	1-1/4" P. J. (CTS)	1.3	10
PJA4-46-C14-56	1-1/2" Copper or Plastic Tube	1-1/2" P. J. (CTS)	1.3	8
PJA5-44-C15-54	1" Iron Pipe	1" P. J. for Iron Pipe	1.1	10
PJA5-45-C15-55	1-1/4" Iron Pipe	1-1/4" P. J. for Iron Pipe	1.3	8
PJA5-46-C15-56	1-1/2" Iron Pipe	1-1/2" P. J. for Iron Pipe	1.8	6
PJA6-44	1" Polyethylene Pipe	1" P. J. for P.E. Pipe*	1.4	10
PJA6-45-C16-55	1-1/4" Polyethylene Pipe	1-1/4" P. J. for P.E. Pipe	1.5	8
PJA6-46-C16-56IDR7	1-1/2" Polyethylene Pipe	1-1/2" P. J. for P.E. Pipe	2.6	4
PJA7-44	1" PVC Pipe	1" P. J. for PVC Pipe	2.9	10
PJA7-45-C17-55	1-1/4" PVC Pipe	1-1/4" P. J. for PVC Pipe	1.6	8
PJA7-46	1-1/2" PVC Pipe	1-1/2" P. J. for PVC Pipe	2.1	4

\* **Grip Joint** for CTS and PEP (3/4" & 1") can be ordered by adding "-G" to the catalog number.

◆ **Quick Joint** can be ordered by adding "-Q" to this catalog number.

**NOTE:** Ford recommends using Insert Stiffeners when using plastic pipe or tubing. Insert Stiffeners are listed in Catalog Section J.

## Pack Joint Ell Assemblies for KH-1, KH-2 and KH-3 Kornerhorns (two required per Kornerhorn)



CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	SIZE AND TYPE OF EXISTING PIPE	P.J. ASSEMBLY REQUIRED		
PJAL4-13	3/4" Copper or Plastic Tube	3/4" P. J. for (CTS)*	.9	-
PJAL6-13	3/4" Polyethylene Pipe	3/4" P. J. for P.E. Pipe*	-	-

\* **Grip Joint** for CTS and PEP (3/4" & 1") can be ordered by adding "-G" to the catalog number.

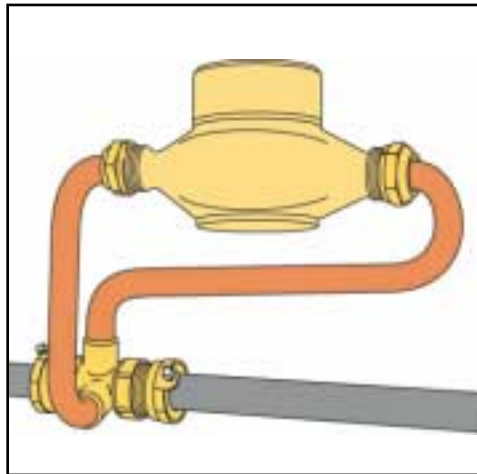
## Special Items for Kornerhorns (Available for KH-1, KH-2 and KH-3 Kornerhorns only) (two required per Kornerhorn)

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.	STD. PKG. QTY.
PJAS-11	1/2" Solder Sleeve (includes KHSCW, solid copper washer)	.3	56
PJAS-13	3/4" Solder Sleeve (includes KHSCW, solid copper washer)	.3	50
PJA8-13	3/4" Male Iron Pipe Thread	.3	56
PJA8-15	1-1/4" Male Iron Pipe Thread	.5	-
KHSCW	Solid Copper Washer (for positioning KH-Valve-1)	-	-
650024-EP	Kornerhorn Body O-ring only (Formerly KH-O-Ring)	-	-
65021X2-EP	O-ring for Kornerhorn Valve Swivel Connection	-	-

# Pretzelhorns - *For metering existing services*

The Ford Pretzelhorn provides easy installation of a meter in a short run of horizontal pipe or where space is crowded by gas or drain pipes, water heaters, or other equipment.

The Pretzelhorn can be installed in 7-1/2" of pipe and can be turned to place the meter either to the right or left of the cut-out section. Pretzelhorns are connected to the piping with removable Pack Joint Assemblies, the same as Kornerhorns and Drophorns. The picture below shows a typical Pretzelhorn installation.



The above illustration shows a PH-2 Pretzelhorn for a 5/8"x3/4" meter with two PJA5-13 Pack Joint Assemblies for installation in an existing 3/4" iron pipe service.

CATALOG NUMBER	METER SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
PH-1	5/8"	2.5	1
PH-2	5/8"x3/4"	2.6	1
PH-3	3/4"	2.7	1
PH-4	1"	4.8	1

**NOTE:** All solder joints on Ford Inside Setters are made with **lead-free solder**.

Ford Pretzelhorns are manufactured to position the meter to the right of the body as shown above. Occasionally, installation space constraints require Pretzelhorns with the meter positioned left of the body. Designate this option by adding a "-L" to the end of the part number. Example: PH-2-L.

Pack Joint Assembly pipe connections or solder connections available for Pretzelhorns are identical to those offered for Kornerhorns and are listed on page 11.

## *For metering existing services* - **Drophorns**

The Drophorn simplifies the installation of a meter in buildings where the water line is near the basement or utility room ceiling. It eliminates major piping changes and saves time and money.

Because of the wide variation in the distance from the pipe to the desired meter location, Drophorns are made to order in lengths of 18", 24", 30", 36", 42" or longer. Two types are available: Type A, which places the meter in line with pipe, and Type B, which places it at right angles. Drophorns are connected to the piping with removable Pack Joint Assemblies, the same as Kornerhorns and Pretzelhorns.

Two types are available: Type A places the meter in line with the pipe.

Type B places the meter at a right angle to the pipe.



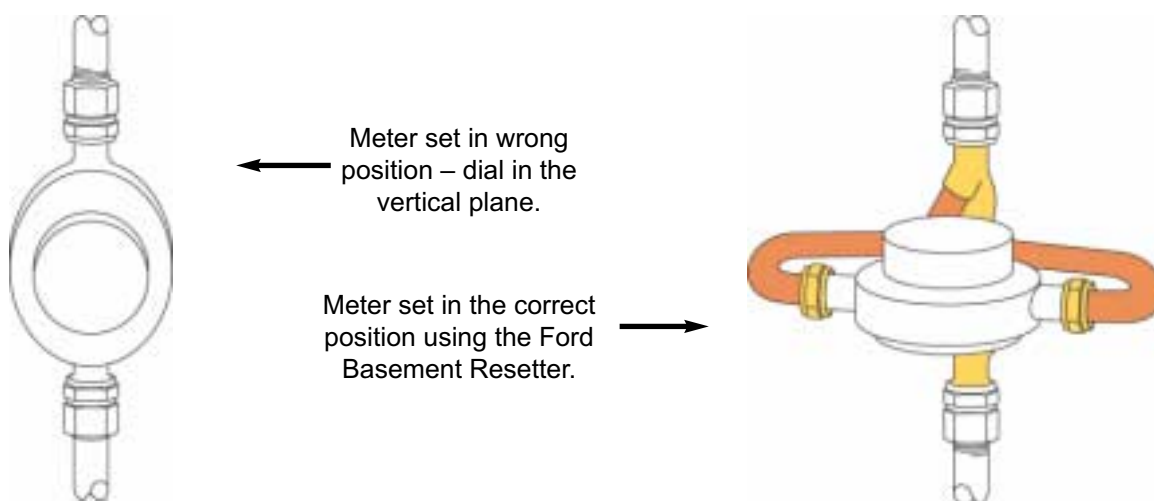
CATALOG NUMBER	METER SIZE	TYPE OF DROPHORN ALIGNMENT	LENGTH (DISTANCE OF DROP)	APPROX. WT. LBS.	STD. PKG. QTY.
DH-1A-18	5/8"	A	18"	-	6
DH-1A-24	5/8"	A	24"	-	6
DH-1A-30	5/8"	A	30"	-	6
DH-1A-36	5/8"	A	36"	-	6
DH-2A-18	5/8"x3/4"	A	18"	-	6
DH-2A-24	5/8"x3/4"	A	24"	-	6
DH-2A-30	5/8"x3/4"	A	30"	-	6
DH-2A-36	5/8"x3/4"	A	36"	-	6
DH-3A-18	3/4"	A	18"	-	6
DH-3A-24	3/4"	A	24"	-	6
DH-3A-30	3/4"	A	30"	-	6
DH-3A-36	3/4"	A	36"	-	6
DH-4A-18	1"	A	18"	-	6
DH-4A-24	1"	A	24"	-	6
DH-4A-30	1"	A	30"	-	6
DH-4A-36	1"	A	36"	-	6
DH-1B-18	5/8"	B	18"	-	6
DH-1B-24	5/8"	B	24"	-	6
DH-1B-30	5/8"	B	30"	-	6
DH-1B-36	5/8"	B	36"	-	6
DH-2B-18	5/8"x3/4"	B	18"	-	6
DH-2B-24	5/8"x3/4"	B	24"	-	6
DH-2B-30	5/8"x3/4"	B	30"	-	6
DH-2B-36	5/8"x3/4"	B	36"	-	6
DH-3B-18	3/4"	B	18"	-	6
DH-3B-24	3/4"	B	24"	-	6
DH-3B-30	3/4"	B	30"	-	6
DH-3B-36	3/4"	B	36"	-	6
DH-4B-18	1"	B	18"	-	6
DH-4B-24	1"	B	24"	-	6
DH-4B-30	1"	B	30"	-	6
DH-4B-36	1"	B	36"	-	6

Pack Joint Assembly Pipe Connections or Solder Connections available for Drophorns are identical to those offered for Kornerhorns and are listed on page 11.

# Basement Resetters - *For existing meter services*

Many older services have the meter installed in an incorrect position. The dial is set in the vertical plane, causing rapid wear of the piston or disc and thus an under-registration of water usage. The Basement Resetter corrects this problem, since its inlet and outlet threads are spaced the same as those of a standard meter and are attached to the existing meter couplings. The meter is then placed into the setter in the correct horizontal position, the entire installation job taking only a few minutes.

After the Basement Resetter is installed it gives you the same benefits of any other Ford Inside Setter. It holds the piping permanently in place and provides electrical bonding when the meter is removed. Meter changes are easy and trouble-free.



CATALOG NUMBER	METER SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
RESETTER-51	5/8"	2.5	10
RESETTER-52	5/8"x3/4"	2.7	10
RESETTER-53	3/4"	2.9	10
RESETTER-54	1"	6.9	5



# Style A and B Wall Setters

## Tandem Inside Settings *for special metering applications*

Ford Wall Setters are designed to allow a utility to install a meter and a pressure regulator in a single setting. Please specify the length of the regulators when ordering.

**Style "A" Description:** Setter including integral check valve, meter nuts and adapters for pressure regulator.

**Style "B" Description:** Setter including meter nuts and adapters for pressure regulator.

Each end of the Wall Setter body has 3/4" male iron pipe threads for a variety of couplings, valves and check valves.



Style A Wall Setter with  
Optional Valves

### Style "A" Integral Check Wall Setter for 5/8" and 5/8"x3/4" Meters

CATALOG NUMBER	DESCRIPTION	METER NUT SPACING	COUPLINGS AND ADAPTERS INCLUDED
WSB	Bracket for wall mounting	-	-
Clamp-32	Stainless Steel Clamp for above	-	-
WS88-133A	Setter for 5/8" meter including meter nuts, adapter, etc.	15-5/8"	One RA-1, one C38-13-2.188
WS88-233A	Setter for 5/8"x3/4" meter including meter nuts, adapter, etc.	15-1/4"	One RA-2, one C38-23-1.625

**NOTE:** Couplings, adapters and optional items will be packaged separately from Wallsetters.



Style B Wall Setter with  
Optional Valves

### Style "B" Wall Setter for 5/8", 5/8"x3/4" and 3/4" Meters

CATALOG NUMBER	DESCRIPTION	METER NUT SPACING	COUPLINGS AND ADAPTERS INCLUDED
WSB	Bracket for wall mounting	-	-
Clamp-32	Stainless Steel Clamp for above	-	-
WS88-133B	Setter for 5/8" meter including meter nuts, adapter, etc.	15-5/8"	One RA-1, one C38-13-2.188
WS88-233B	Setter for 5/8"x3/4" meter including meter nuts, adapter, etc.	15-1/4"	One RA-2, one C38-23-1.625
WS88-333B	Setter for 3/4" meter including meter nuts, adapter, etc.	16-3/4"	One RA-2, one C38-23-1.625

**NOTE:** Couplings, adapters and optional items will be packaged separately from Wallsetters.

**All Wallsetters have a spacing to include a 4-1/2" long PRV with 3/4" FIP thread connections.**

# Section B

# Ford Inside Meter Settings

## Warranty

All merchandise is warranted to be free from defects in material and factory workmanship. We will provide, free of charge, new products in equal quantities for any that prove defective within one year from date of shipment from our factory. Manufacturer shall not be liable for any loss, damage, or injury, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use and user assumes all risk and liability whatever in connection therewith. No claims for labor or consequential damage will be allowed. The foregoing may not be changed except by agreement signed by an officer of the manufacturer.

### **Please Note:**

The Ford Meter Box Company considers the information in this catalog to be correct at the time of publication. Items and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.



**The Ford Meter Box Co., Inc.** 775 Manchester Avenue, P.O. Box 443, Wabash, Indiana, USA 46992-0443  
Telephone: 260/563-3171 FAX: 1-800-826-3487 Overseas FAX: 260/563-0167 <http://www.fordmeterbox.com>