

# ENGINEERED PIPE SUPPORTS: CONSTANT SUPPORTS SIZING

- DETERMINE TOTAL LOAD (TL)
- MOVEMENT = ACTUAL TRAVEL (AT)
- TOTAL TRAVEL (TT) ALWAYS > ACTUAL TRAVEL
- $TT = AT + > (20\% AT \text{ or } 1")$ , ROUNDED UP TO NEXT  $\frac{1}{2}"$
- SELECT SIZE FROM CHART TO ACCOMMODATE TT & TL
- SELECT TYPE BASED ON PHYSICAL ATTACHMENT
- DETERMINE J-rod (TYPES A thru E) & K-hole (TYPES B & C)

# Constant Support Problem #1

- Load = 625#
- Movement = 1 3/4" down

# Constant Support Problem #1

Load = 625#      Mvt. = 1 3/4" down

Actual Travel (AT) = 1.75"

Total Travel (TT) = the greater of:

$$(1.75) (1.2) = 2.1$$

- or -

$$1.75 + 1 = \underline{2.75}$$

Total Travel (TT) = 3"  
(2.75 Rounded up to next 1/2")

# Constant Support Problem #1

Load = 625#

TT = 3"

Using Constant Support  
selection table  
(Pages 160 – 163):

Read 3" Total Travel across top  
Read down to 687  
Read across to Size 14

Hanger Size No.	TOTAL TRAVEL* (IN); LOAD						
	1½	2	2½	3	3½	4	4½
1	144	108	86	72	62	54	48
	173	130	104	87	74	65	58
2	204	153	122	102	87	77	68
3	233	175	140	117	100	88	78
4	280	210	168	140	120	105	93
5	327	245	196	163	140	123	109
6	373	280	224	187	160	140	124
7	451	338	270	225	193	169	150
8	527	395	316	263	226	198	176
9	600	450	360	300	257	225	200
10	727	545	436	363	311	273	242
11	851	638	510	425	365	319	284
12	977	733	586	489	419	367	326
13	1,177	883	706	589	505	442	392
14	1,373	1,030	824	687	589	515	458
15	1,573	1,180	944	787	674	590	524
16	1,893	1,420	1,136	947	811	710	631
17	2,217	1,663	1,330	1,109	950	832	739
18	2,540	1,905	1,524	1,270	1,089	953	847

# Constant Support Problem #1

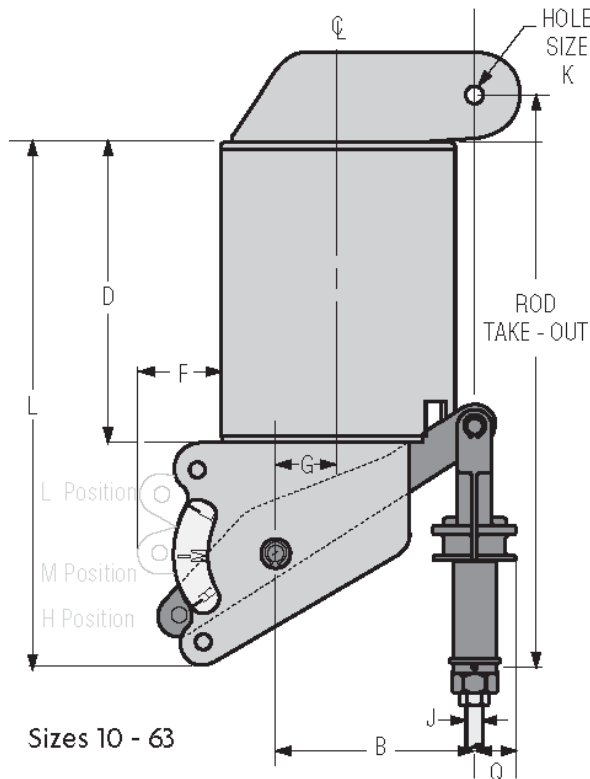
**Load = 625#      TT = 3"      Size 14**

From J-Rod &  
K-Hole selection chart:

(Pages 158 – 169)

J-Rod = 1/2"

K-Hole = 11/16"

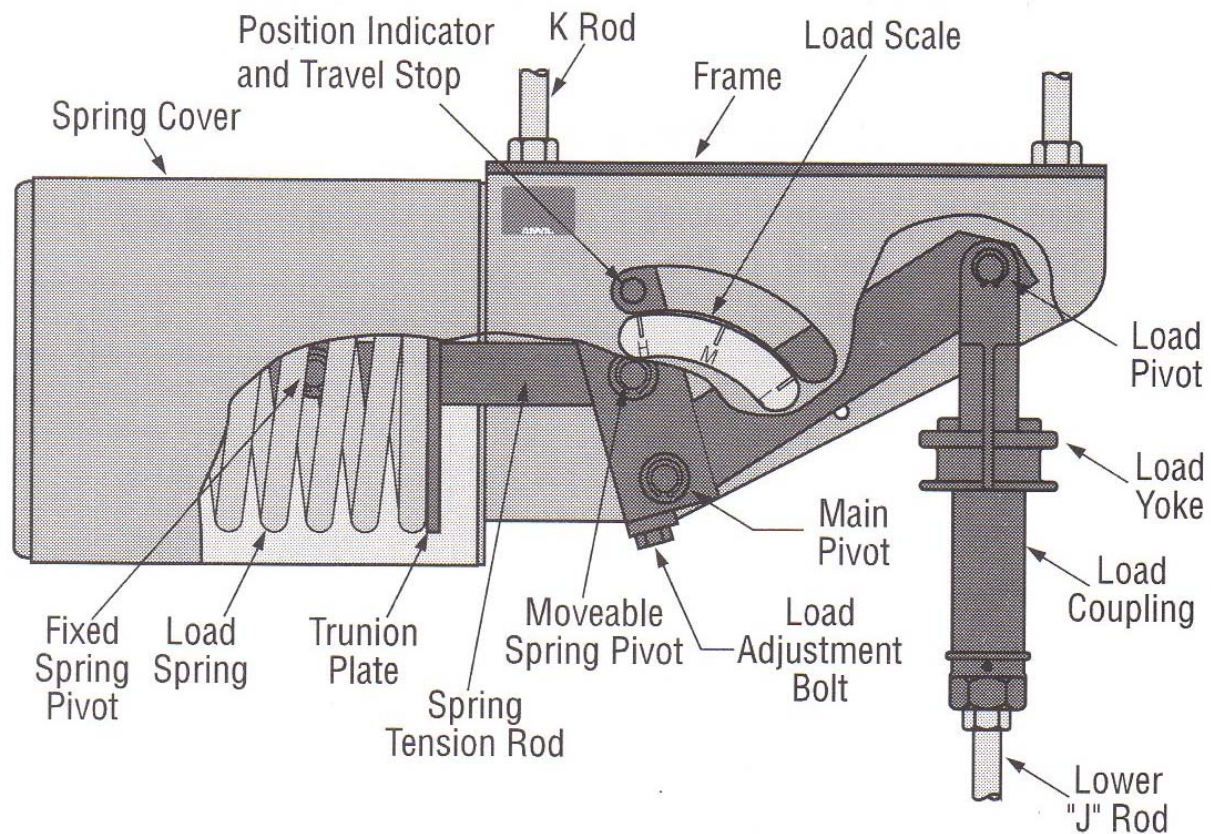


Load (lbs)	0 800	801 1,500	1,501 2,540	2,541 4,000	4,001 6,100	6,101 9,400	9,401 13,400	13,401 18,300	18,301 24,700	24,701 31,000	31,001 39,000	39,001 48,000	48,001 58,000
J-Rod Size	1/2	5/8	3/4	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4*
K-Hole Size	1 1/16	1 3/16	1 5/16	1 1/4	1 1/2	1 3/4	2	2 1/8	2 1/4	2 1/2	2 5/8	3 1/8	3 1/4
S	7/8	1 1/8	1 1/4	1 5/8	2	2 1/8	2 1/4	2 1/2	3	3 1/8	3 1/4	3 5/8	4 1/8



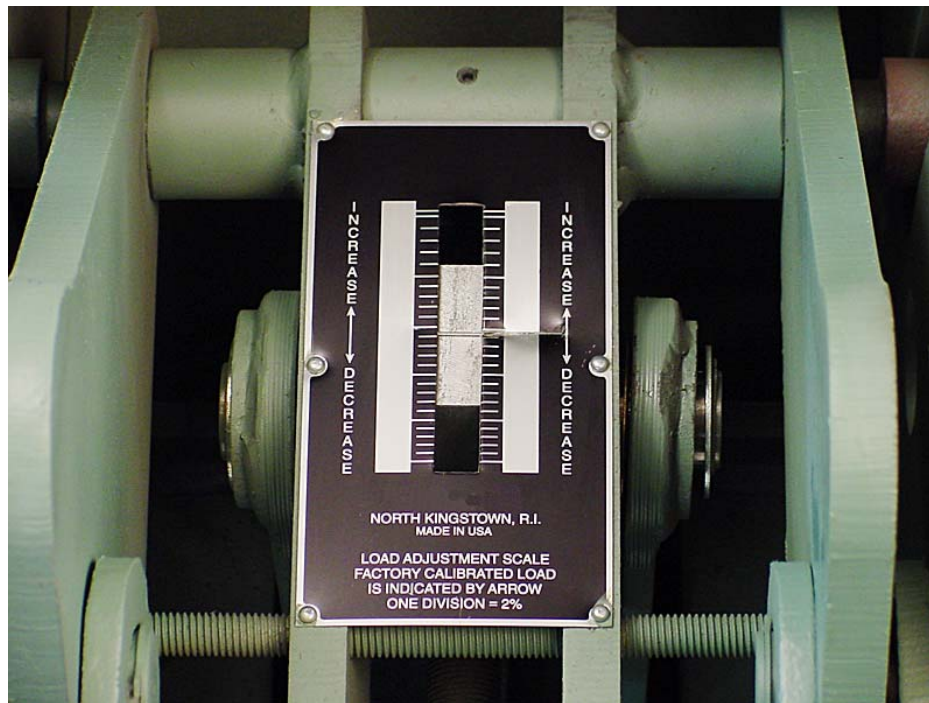
**BUILDING CONNECTIONS THAT LAST**

## Fig.81-H, Type A, Constant Support



**BUILDING CONNECTIONS THAT LAST**

## Load Adjustment Scale



## Travel Stop & Caution Tag

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**BUILDING CONNECTIONS THAT LAST**

## CONSTANT SUPPORTS

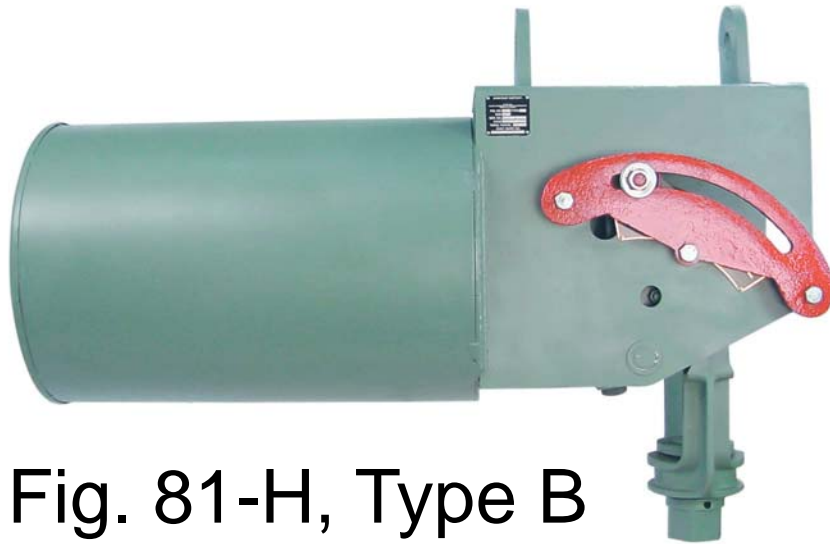


Fig. 81-H, Type B



Fig. 80-V, Type B





**BUILDING CONNECTIONS THAT LAST**

# Questions? Contact us!

## We'd love to work with you!

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