

# CRE3000

## SUSPENSION SYSTEM

### QUALIFICATION GUIDE



#### STEP 1A

If axles are Over Slung (OS) as shown in figure 1, ALL frame hangers need to be a minimum of 3 1/4" tall.

#### STEP 1B

If axles are Under Slung (US) as shown in figure 2, ALL frame hangers need to be a minimum of 4 1/4" tall.

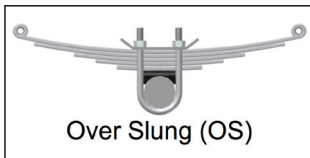


figure 1

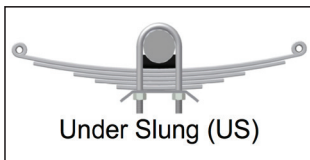


figure 2

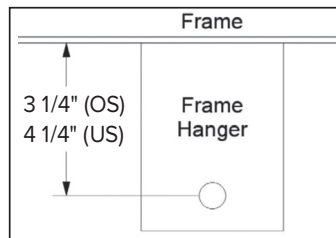


figure 3

#### STEP 2

Equalizer hanger width **MUST** be 3" **and** 1 1/2" from edge of hanger to center of hole. If wider, trim hanger as shown in figure 4. Contact MORryde for variations other than what is shown.

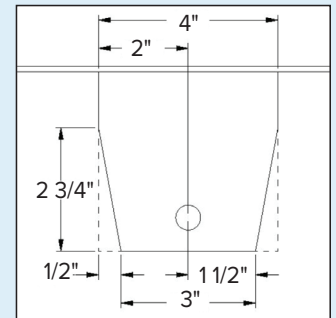


figure 4

#### STEP 3

If frame hanger has height adjustment, the **CRE3000** must be installed in the tall ride height (lowest hole) **OR** the taller setting(s) (lowest holes) could be cut off—be sure to leave the same amount of material below the installation hole as there was below the bottom hole.

#### STEP 4

A 1 3/4" wide double-eye leaf spring must be used. The **CRE3000** is not compatible with slipper-style leaf springs.

#### STEP 5

Verify the frame hanger spread (FHS) as shown in figure 5 meets the minimum measurement required given the variables in the table below.

| Wheelbase | Leaf Spring Length | Equalizer Length       | Minimum FHS Measurement |         |
|-----------|--------------------|------------------------|-------------------------|---------|
|           |                    |                        | Tandem                  | Triple  |
| 31"       | 24"                | N/A                    | 54 7/8"                 | 85 7/8" |
| 33"       | 26"                | N/A                    | 58 7/8"                 | 91 7/8" |
| 35"       | 26"                | N/A                    | 60 3/4"                 | 95 3/4" |
| 42"       | 26"                | 14 3/4" (See figure 6) | 67 3/4"                 | N/A     |
| 42"       | 31"                | 10" (See figure 7)     | 72 3/4"                 | N/A     |

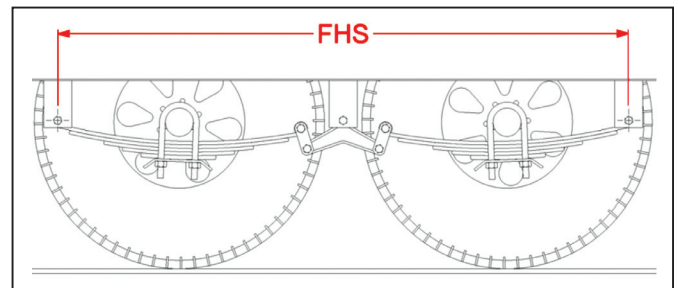


figure 5

#### STEP 6

Shackle links that measure 2 1/4" from hole center to hole center must be used. The only exception is for units with equalizer hangers that are at least 4 1/4" tall **AND** the axles are overslung. In this case, either the 2 1/4" or 3 1/8" shackle links can be used.

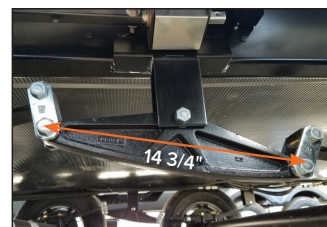


figure 6

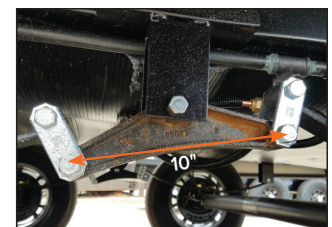


figure 7

## STEP 7

Take the following measurements:

- \_\_\_\_\_ (A) Distance from the side of the tire to the side of the frame hanger.  
A minimum of 1 11/16" is required.
- \_\_\_\_\_ (B) Distance from the top of the tire to the bottom of the floor at load.  
A minimum of 3" is required. It is best practice to utilize a bump stop on the frame of the trailer for the axle assembly to bottom into before the tire contacts the floor.
- \_\_\_\_\_ (C) Distance from the closest part of the axle assembly to the underside of the frame at load. A minimum of 2 1/2" is required.
- \_\_\_\_\_ (D) Height of the stock equalizer from the center of the top bolt hole to the center of the bottom bolt hole.

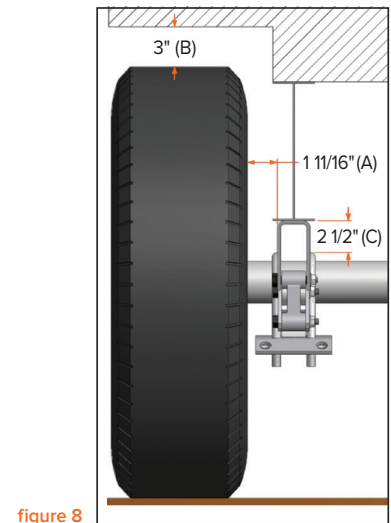


figure 8

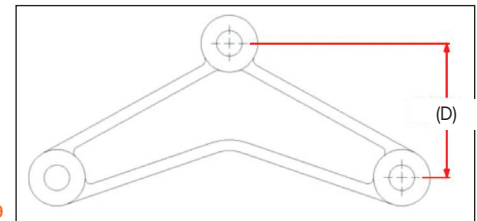


figure 9

## STEP 8

It is important to verify that the installation of the **CRE3000** will not affect the above clearance requirements.

### OPTION 1:

If your measurement (D) is **greater than 2 3/4"**, perform the following calculations:

$$\frac{\text{Measurement (D)} - 2 \frac{3}{4}''}{2} = (X)$$

**Subtract Measurement (X) from Your Measurement (B).**

(B) - (X) = must be a minimum result of 3"

**Subtract Measurement (X) from Your Measurement (C).**

(C) - (X) = must be a minimum result of 2 1/2"

### OPTION 2:

If your measurement (D) is **less than 2 3/4"**, perform the following calculations:

$$\frac{2 \frac{3}{4}'' - \text{Measurement (D)}}{2} = (Y)$$

**Add Measurement (Y) to Your Measurement (B).**

(B) + (Y) = must be a minimum result of 3"

**Add Measurement (Y) to Your Measurement (C).**

(C) + (Y) = must be a minimum result of 2 1/2"



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