



**Independent Suspension System
(IS)
Alignment Guide**

MOR/ryde International
1966 Moyer Avenue
Elkhart, IN 46516
574-293-1581

www.morryde.com

SECTION I

DESCRIPTION

The MOR/ryde "IS" Independent Rubber Suspension System uses 100% Natural Rubber Springs to support the trailer weight and absorb road shock. By absorbing the shock, the rubber provides a much smoother towing experience than steel leaf springs. With the new MOR/ryde "IS" Independent Rubber Suspension System, there are no more broken leaf springs! The towing is virtually hassle-free with the smoothest towing available for fifth wheels and travel trailers.

The Primary benefits that you can expect from the MOR/ryde "IS" suspension are:

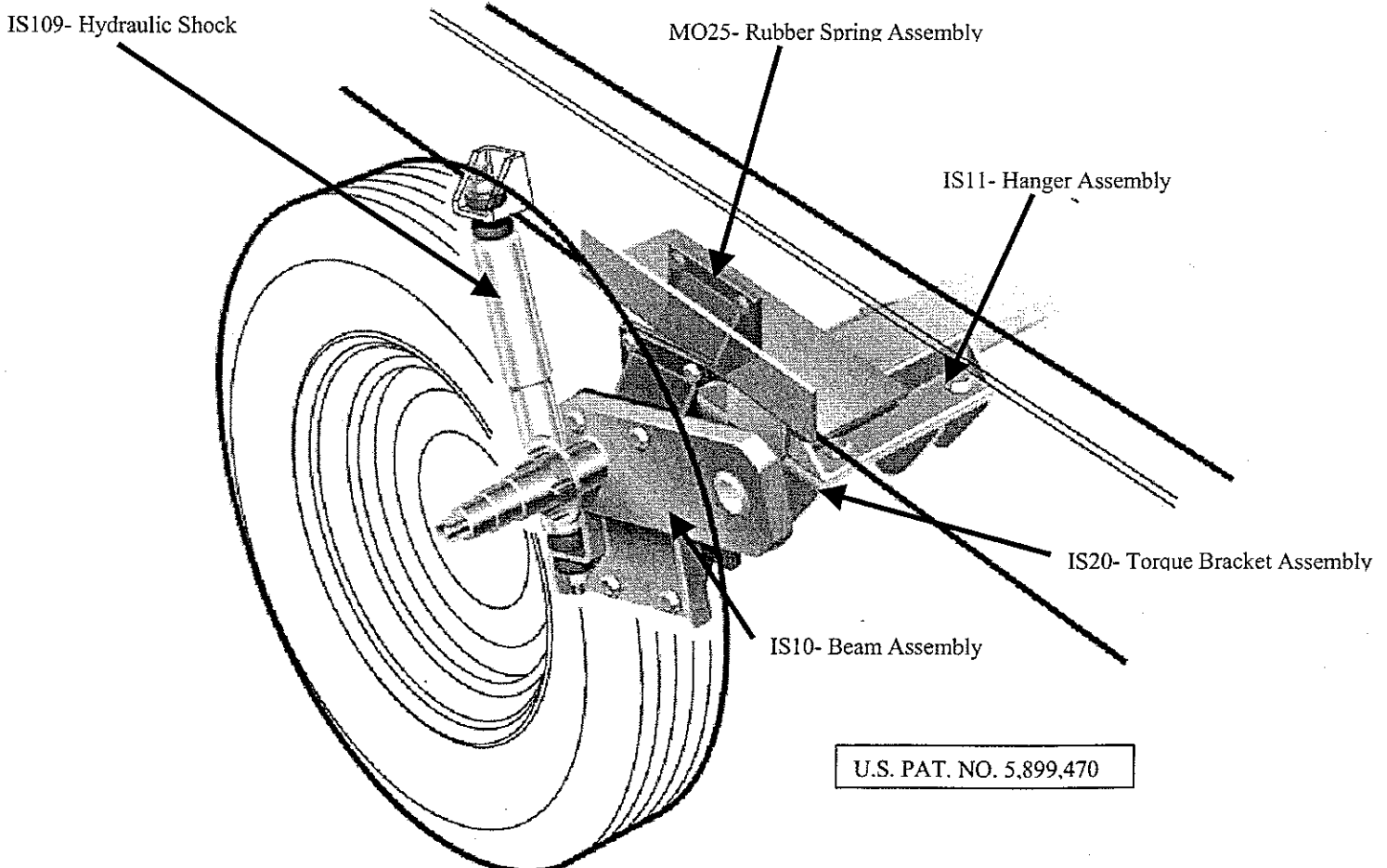
SMOOTHER TOWING - the MOR/ryde suspension has up to 2 1/2 times the suspension travel of leaf springs or rubber axles, allowing the MOR/ryde suspension to absorb road shock much better.

IMPROVED TOWABILITY - the MOR/ryde suspension is designed to "block" body roll, improving the cornering and stability of the tow vehicle and trailer combination.

AUTOMOTIVE STYLE ALIGNMENT - a MOR/ryde first! You can manage your tire wear through toe and camber adjustments, a feature no other towable suspension offers!

HEIGHT ADJUSTABILITY - the MOR/ryde suspension can be adjusted easily to accommodate different tow heights and to compensate for side-to-side load variations.

PROVEN DURABILITY - the MOR/ryde suspension has undergone strenuous testing to prove its durability. The result? No more broken leaf springs!



Independent Suspension (IS) Alignment Procedures

The design of the MOR/ryde independent suspension system allows for automotive style toe and camber wheel alignment. This allows the operator of the RV to effectively manage tire wear under normal towing conditions. There are four bolts and one torque bracket per wheel that allow for these adjustments. Refer to the directions below to proper toe and camber procedures.

NOTE: Always adjust the camber first followed by the toe.

Alignment Specifications

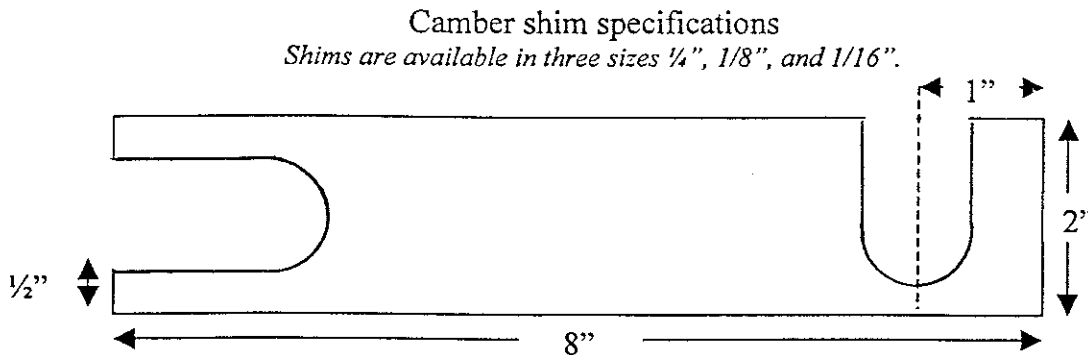
Camber (+0.5 degrees to +0.8 degrees)

Toe (+0.01 inches to +0.06 inches)

Adjusting the Camber

- 1) Connect the alignment machine and level the unit on the alignment turntables.
- 2) Loosen the four torque bracket bolts.
- 3) If the camber is negative, add a shim(s) to the outside of the torque bracket.
- 4) If the camber is positive, add a shim(s) to the inside of the torque bracket.
- 5) A 1/4" shim will change the camber approximately 1 degree.
- 6) Tighten torque bracket bolts.

Note: The unit will need to be raised to add camber.



Adjusting the Toe

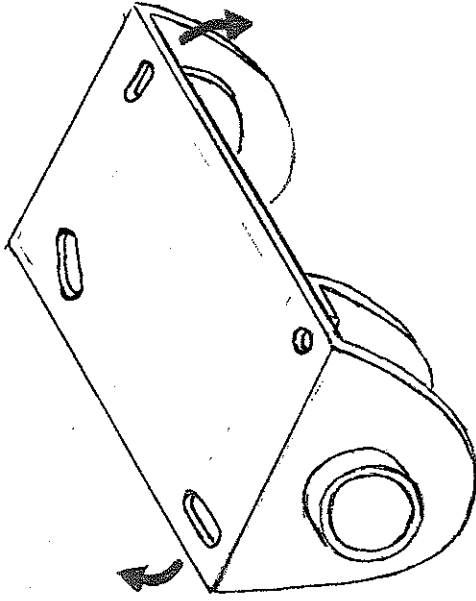
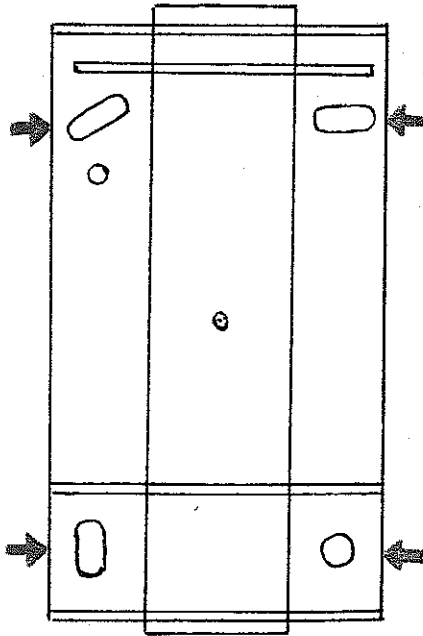
- 1) Connect the alignment machine and level the unit on the alignment turntables.
- 2) Loosen the four torque bracket bolts.
- 3) Adjust the torque bracket assembly to obtain the correct toe readings on the alignment machine.
- 4) Tighten the torque bracket bolts.

Note: Toe adjustments can be eased by the use of a "port-a-power" or large adjustment bar.

IS Torque Bracket Alignment

Toe

- 1) Loosen highlighted bolt and nut assembly.
- 2) Adjust torque bracket side to side to achieve proper toe alignment.
- 3) Tighten $\frac{1}{2}$ " bolts to 60 foot lbs.
Tighten $\frac{3}{4}$ " bolts to 180 foot lbs.



Camber

- 1) Loosen highlighted bolt and nut assembly.
- 2) Add shims to the inside or outside of the torque bracket to until proper camber is achieved.
- 3) Tighten $\frac{1}{2}$ " bolts to 60 foot lbs.
Tighten $\frac{3}{4}$ " bolts to 180 foot lbs.

