CHECK LIST FOR DELIVERY

MINIMUM WEIGHT OF TOW VEHICLE

The **minimum** recommended weight for the tow vehicle is **10,000 lb gross vehicle weight (GVW)**. There is **no specified maximum weight** for the tow vehicle. In other words, the trailer can be attached to any support truck weighing more than 10,000 lb.

TOW VEHICLE ROLL AHEAD DISTANCES

The space between the support vehicle and the workers should exceed the roll ahead distance under the prevailing operating conditions, as shown in the attached tables.

1. Assess the nature of the operation, i.e., moving or stationary operation, and use the corresponding table.
2. Select the weight that best approximates the actual weight of the tow vehicle, including the weights of items to be carried on the truck during the operation and the weight of the TTMA-100.
3. Select the range of prevailing speed of the traffic at the work zone.
4. Select the weight of the impact vehicle to be contained.
5. Select from the appropriate table the expected roll ahead distance

Show an example of how the tables are to be used.

ATTACHMENT OF TTMA-100 TO TOW VEHICLE

The TTMA-100 is attached to the tow vehicle via the pintle hook with a minimum capacity of 8 tons.

- ☐ **Warning! Verify that the retaining pin for the pintle hook is properly locked to avoid accidental release of the pintle hook and the TTMA-100.**
- ☐ **Warning! Make sure that the trailer lights are connected to the tow vehicle and are operating properly.**
- ☐ **Warning! Ensure that the safety chains properly secure the TTMA-100 to the tow vehicle.**

OPERATION OF TTMA-100

Operation of the Trailer TMA is similar to that of other trailers. Special attention should be given to the following issues:

- ☐ **Warning! The TTMA-100 device does not have brakes. All braking will be dependent on the tow vehicle. Thus, additional distance should be allowed for in braking and stopping of the tow vehicle.**
- ☐ **Warning! Do not use the Trailer TMA for hauling. Objects on the trailer would be a hazard for vehicles impacting the TTMA-100.**
- ☐ **Warning! Attachment of the trailer TMA results in wider turns and drivers should adjust their driving accordingly.**
- ☐ **Warning! Attachment of any trailer TMA will result in different handling for the tow vehicle while backing up and drivers should adjust their driving accordingly.**
- ☐ **Warning! Tow vehicles should be equipped with head rests, lap belts and shoulder straps and operators should adjust their head rest to contact the center of the head and should wear seat belt and shoulder strap at all times.**
- ☐ **Warning! Do not attach any item to the trailer or hitch without explicit approval from the manufacturer or distributor.**

MAINTENANCE GUIDELINES

Proper maintenance of the TTMA-100 is critical to assure continuing safe operation and long-term durability of the device. Even though the unit is galvanized, the outside of the TTMA-100 should be washed periodically, particularly during winter usage, to eliminate salt and other road contaminants. The inside of the frame should also be washed annually. The end caps can be removed to allow rinsing the inside of the frame. Care should be taken with the wiring for the side marker lights during this process.

Recommended preventive maintenance schedule:

Item	Function Required	Before Each Use	Weekly	3 Months/ or 3,000 Miles	12 Months or 12,000 Miles
Lighting System	Test that all lights are operational	••			
Pintle Hook	Check capacity and verify that the retaining pin is properly inserted	••			
Safety Chains	Check that they are properly attached	••			
Tire Inflation	Set to 30 psi		••		
Tire Condition	Inspect for cuts, wear, bulging, etc…			••	
Wheels	Inspect for cracks, dents, distortion or other signs of wear			••	
Bolts and Wheel Nuts	Tighten to manufacturer specified torque values			••	
Wheel Bearings and Cups	Inspect for corrosion or wear. Clean and repack				••
Frame Welds	Check for cracks, call STI for instruction if cracks are detected.				••

Roll Ahead Distances for MOVING Operation

(Based on shadow vehicle speed of 15 mph)

Tow Vehicle Weight, lb	Traffic Operating Speed, mph	Impact Vehicle Weight, lb			
		4500	10000	15000	24000
10000	65	119’	205’	261’	333’
	55	97’	158’	198’	247’
	45	77’	118’	143’	174’
15000	65	93’	161’	211’	278’
	55	78’	127’	162’	209’
	45	65’	97’	120’	150’
24000	65	71’	118’	157’	215’
	55	62’	97’	124’	165’
	45	54’	77’	96’	122’
40000	65	56’	86’	112’	155’
	55	50’	73’	92’	123’
	45	45’	61’	74’	95’
60000	65	48’	68’	86’	118’
	55	44’	60’	73’	96’
	45	41’	52’	61’	77’
80000	65	44’	59’	73’	97’
	55	41’	53’	63’	81’
	45	39’	47’	54’	67’

Roll Ahead Distances for STATIONARY Operation

Tow Vehicle Weight, lb	Traffic Operating Speed, mph	Impact Vehicle Weight, lb			
		4500	10000	15000	24000
10000	65	38’	103’	152’	216’
	55	27’	74’	109’	155’
	45	18’	50’	73’	104’
15000	65	22’	68’	108’	166’
	55	16’	49’	77’	119’
	45	11’	33’	52’	80’
24000	65	11’	38’	65’	111’
	55	8’	27’	47’	80’
	45	6’	18’	32’	54’
40000	65	5’	18’	34’	64’
	55	4’	13’	24’	46’
	45	3’	9’	16’	31’
60000	65	3’	10’	19’	38’
	55	2’	7’	13’	27’
	45	2’	5’	9’	18’
80000	65	2’	6’	12’	25’
	55	1’	5’	9’	18’
	45	1’	3’	6’	12’