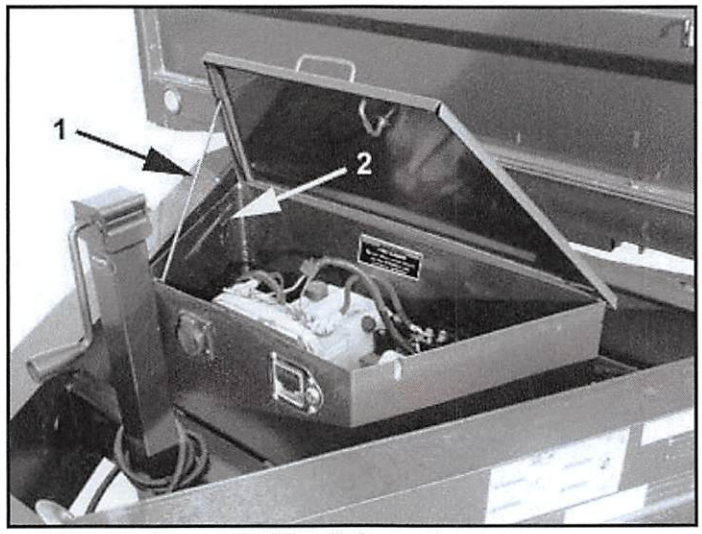


Hydraulic Reservoir

Lug Nuts

Lug nuts are prone to loosen right after a wheel is mounted to a hub. When driving on a remounted wheel, check to see if the lug nuts are tight after the first 10, 25 and 50 miles of driving, and before each tow thereafter.

⚠WARNING

Lug nuts are prone to loosen after being first assembled. Death or serious injury can result. Check lug nuts for tightness on a new trailer, and after re-mounting a wheel at 10, 25 and 50 miles.

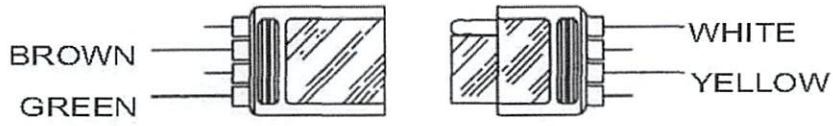
⚠WARNING

Metal creep between the wheel rim and lug nuts (bolts) can cause rim to loosen. Death or injury can occur if wheel comes off. Tighten lug nuts (bolts) before each tow.

Tighten the lug nuts in three stages to the final torque for the axle size on your trailer, to prevent wheels from coming loose. Tighten each lug nut in the order shown in figure below. Use a calibrated torque wrench to tighten the fasteners. Verify that wheel studs are free of contaminates such as paint or grease, which may result in inaccurate torque readings. Over-tightening will result in breaking the studs or permanently deforming the mounting stud holes in the wheels, and will void the axle warranty.

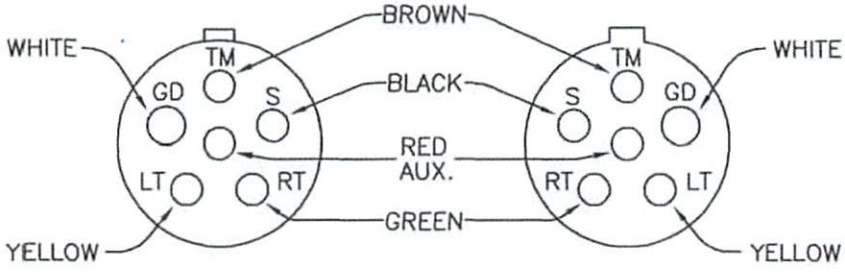
ELECTRICAL CONNECTORS

4 PIN CONNECTOR



COLOR	DESCRIPTION
Brown	Tail Lights
Green	Right Turn
White	Ground
Yellow	Left Turn

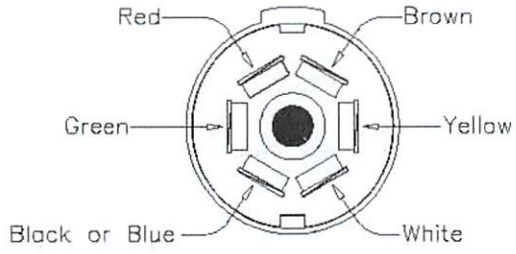
6 PIN CONNECTOR



PLUG	COLOR	DESCRIPTION
GD	White	Ground
S	Black	Electrical Brakes (if equipped)
LT	Yellow	Left Turn Signal
RT	Green	Right Turn Signal
TM	Brown	Tail Lights
CENTER	Red	Charge Line

NOTE: Identify contacts by looking into the open end of plug or socket.

7 PIN CONNECTOR

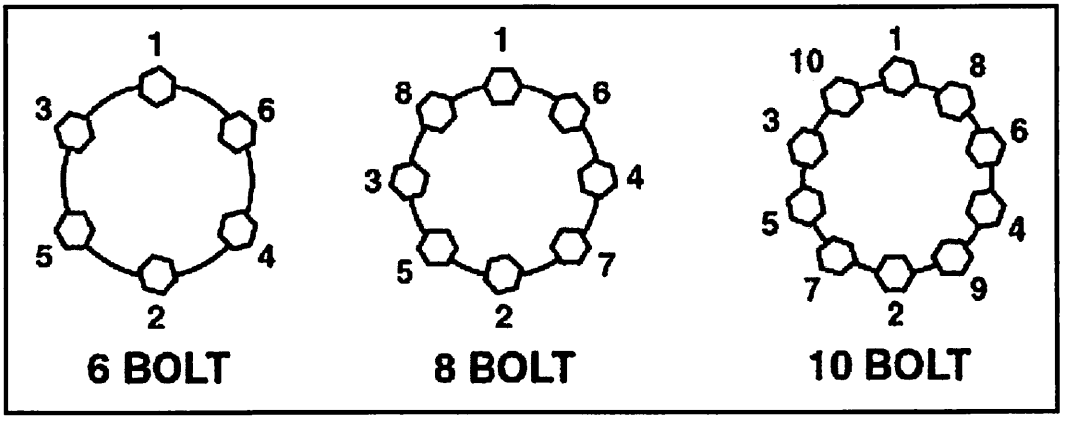


COLOR	DESCRIPTION
White	Ground
Black	Electrical Brakes (if equipped)
Yellow	Left Turn Signal
Green	Right Turn Signal
Brown	Tail Lights
Red	Charge Line

WHEEL TORQUE REQUIREMENTS

9,000 lb. to 15,000 lb. Axles

DESCRIPTION	PART No.	APPLICATION	TORQUE MIN. FT. LBS.	TORQUE MAX. FT. LBS.
5/8-18 90° Cone Nut	006-109-00	Clamp Ring 033-052-01	190	210 - Greased Threads
3/4-10 Hex Nut	006-117-00	Demountable Rim Clamp	210	260
3/4-16 Spherical Nut	006-064-01, 02 006-069-01, 02	Single Wheel Inner Dual	450	500
1 1/8-16 Spherical Nut	006-070-01, 02	Outer Dual	450	500
5/8-18 Flange Nut	006-058-00	Wheels	275	325
M22-1.5	006-118-00	Swiveling Flange Nut	450	500



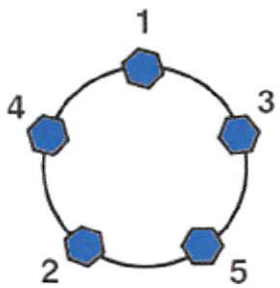
⚠ CAUTION

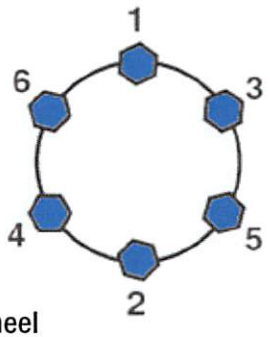
Proper matching of the tire/wheel combination is essential to proper function of your trailer running gear. Some tires may call for a maximum inflation pressure above the rim or wheel capacity. DO NOT EXCEED MAXIMUM INFLATION PRESSURES FOR RIMS OR WHEELS. Catastrophic failure may result.

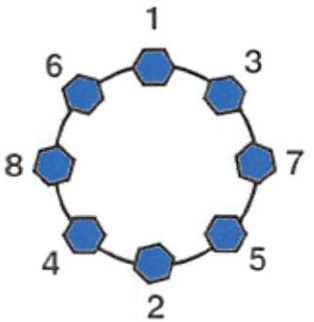
WHEEL TORQUE REQUIREMENTS

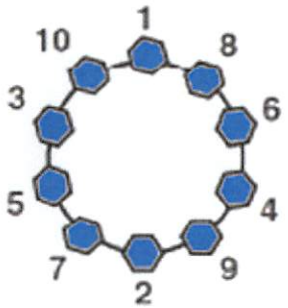
LOAD TRAIL

1. Start all bolts or nuts by hand to prevent cross-threading
2. Tighten bolts or nuts in the sequence shown fr wheel torque requirements.
3.Tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fastners per wheel torque requirements diagram.
4. Wheel nuts/bolts should be torqued before first road use or after each wheel removal. check and re-torque after the first 10 miles, again at 25 miles, and again at 50 miles. Check periodically thereafter.









5,200 lb. - 8,000 lb. Axles

9,000 lb. - 15,000 lb. Axles

WHEEL SIZE	1st STAGE	2nd STAGE	3rd STAGE	DESCRIPTION	PART No.	APPLICATION	TORQUE MIN FT. LBS.	TORQUE MAX FT. LBS.
12"	20-25	35-40	50-75	5/8-18 90°	006-109-00	clamp ring 033-052-01	190	210 greased threads
13"	20-25	35-40	50-75	3/4-10 hex nut	006-117-00	demountable rim clamp	210	260
14"	20-25	50-60	90-120	3/4-16 spherical nut	006-064-01, 02 006-069-01, 02	single wheel inner dual	450 450	500 500
15"	20-25	50-60	90-120	1 1/8-16 spherical nut	006-070-01, 02	outer dual	450	500
16" w/1/2" studs	20-25	50-60	90-120	5/8-18 non-swiveling flange nut	006-058-00	wheels	275	325
16" w/9/16" studs	20-25	80-90	140-170	5/8-18 swiveling flange nut	006-209-00	wheels	150	175
17.5" hub pilot 5/8" flange nut	50-60	90-200	275-325	M22-1.5	006-118-00	swiveling flange nut	450	500
17.5" hub pilot 5/8" swivel flange nut	50-60	60-110	150-175					

QUICK REFERENCE TROUBLE SHOOTING GUIDE

For KTI Hydraulics Pump

For additional trouble shooting questions, please call KTI Hydraulics at (1) -714-556-8818

	Not Building Pressure	Motor Not Running	Cylinder Won't Extend	Cylinder Won't Retract	Won't Hold Load	Excessive Heat From Unit	Aeration of Hydraulic Fluid	Reservoir Overflows	Cylinder Extends With Unit Not Operating	Struggles To Lift Load	Load Bounces When Start Solenoid Just Clicks-Motor Not Engaging	Cylinder Retracts	Won't Lift Load (DC Motor Under Load)	Won't Lift Load (DC Motor Not Under Load)	Won't Lower	Start Solenoid Stays On	Cylinder Won't Retract (Motor Under Load)
LOW BATTERY VOLTAGE		•	•	•		•		•	•		•						
POOR GROUND CONDITION		•	•	•		•		•	•		•						
CHECK HAND CONTROL											•						
DEBRIS IN LOAD HOLDING VALVE					•								•			•	
THERMAL PRESSURE LOCK			•														
COIL NOT ENERGIZING			•	•												•	
BAD SEALS IN CYLINDER	•											•	•			•	
LOOSE INLET				•		•	•			•						•	
PACKING ON CYLINDER ROD WORN OUT			•		•			•		•						•	
HOSES CONNECTED BACKWARDS				•						•			•			•	
PUMP NOT PRIMING	•		•							•							
CLOGGED ORIFICE				•													
RUST IN MOTOR		•											•			•	
BAD DIODE				•													
CHECK FOR ADDITIONAL VALVING ON OR CONNECTED TO CYLINDER				•												•	
DIRECTIONAL VALVE NOT SHIFTING PROPERLY			•	•													
BAD START SOLENOID									•		•		•			•	
DIRTY CONTACTS IN HAND CONTROL			•	•							•	•	•	•			

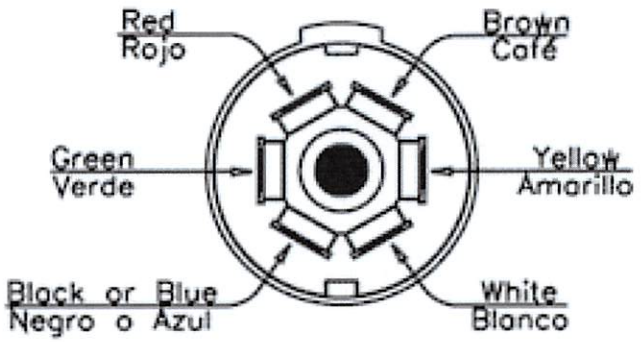
WIRE COLOR GUIDE

LOAD TRAIL

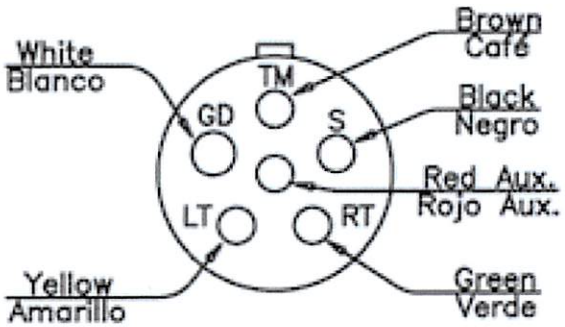
NOTE: **Identify contacts by looking into the open end of plug or socket.**

PLUG	COLOR	DESCRIPTION
GD	White	Ground
S	Blue or Black	Electrical Brakes (if equipped)
LT	Yellow	Left Turn Signal
RT	Green	Right Turn Signal
TM	Brown	Tail Lights
Center	Red	Charge Line

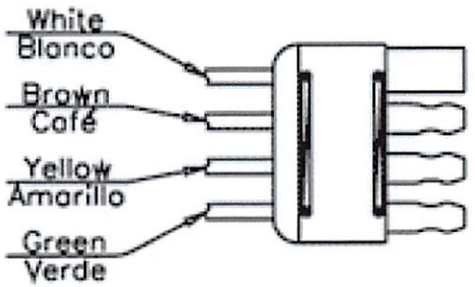
7–WAY PLUG WIRE DIAGRAM



6–WAY PLUG WIRE DIAGRAM



4–WAY PLUG WIRE DIAGRAM



cause wear on the adjusting threads and the suspension cannot be kept in alignment. On leaf spring type suspensions, have the trailer checked for axle alignment after two to three thousand miles.

Check leaf springs for broken leaves. Replace broken leaves immediately to prevent the other leaves from being overloaded. On taper leaf springs, be sure the plastic liner is serviceable and on top of the spring. The liners between leaves should be in place and serviceable.

Heavy Duty Suspension Torque Requirements

CAUTION

Before torquing equalizer bolts, level equalizers parallel to main frame members. After initial break-in period (up to 1,000 miles) and at least every 4 months thereafter; all bolts and nuts should be checked to ensure recommended torque is being maintained.

Torque Values for Bolts With Clean Dry Threads

Description	Torque Ft. Lbs.
1⅛-7 UNC Nut Oiled Dry	 615 815
1-8 UNC Nut; Dry	350
Spring Keeper Nut ⅝-18 UNF; Dry	50
Track Rod Clamp Nut ⅝-11 UNC; Dry	150
U-Bolt 3/4-10 UNC Nut; Dry	200