

## **Cable Drum Carrier Trailer C-700-F**

### **Introduction.**

The Trailer has been designed primarily for the purpose of transporting and unreeling cable drums up to 2750Kg weight only provided that the drum is of maximum width that the trailer will accept (see below).

The Trailer rides on two pneumatic road wheels with heavy duty hollow rubber suspension units. The position of the axle stubs is such that a nose weight is always present through the towing eye in both the laden and unladen conditions.

Loading of the cable drum is achieved by loading the drum and spindle tube in the sliding chevrons which can then be locked in position. Two hydraulic cylinders are then raised which leaves the drum free to unreel or be transported. (see detailed procedure in operating instructions).

Note:-

If the Trailer is received with hydraulic rams raised then a weight is required to exhaust rams back to retracted position, after releasing hydraulic relief valve.

The trailer complies in all respects to current EEC Directives and Construction and use regulations and further embrace relevant conditions stated in Supply of Machinery (Safety) Directive 2006/42/EC.

**Maximum S.W.L of Spindle = 2750Kgs. At drum width 1280mm.**

## Cable Drum Trailer C-700-F Operation Sequence

### Warning - Ensure Safety of Hands and Feet when Manhandling Trailer.

#### Before Use

Ensure locking plates (Item 2 PL 302) are correctly adjusted i.e. a very slight binding fit achieved. If found to be loose the retaining nut should be adjusted by the maintaining workshop.

#### To Load Cable Drum.

1. If Trailer is to be unhitched from towing vehicle, the trailer MUST be supported by ensuring the Jockey Wheel is lowered and clamped securely.
2. Remove spindle Locking Bar Clips (Item 3 PL302)
3. Now remove locking bars, thus the spindle bar can be removed. Take off one spindle bar collar and slide the spindle bar into the drum. Make the spindle bar overhang equal each side and tighten up the spindle bar collar, using a 19mm A/F spanner supplied.
4. Reverse trailer to drum until support chevrons contact spindle bar, if chevrons foul entry of spindle bar, pump up slides alternatively until clear.
5. Locate locking bars back into original position and lock by inserting locking bar clips (Item 3 PL 302).
6. Apply handbrake, lower rear prop stands and clamp securely

#### To Raise Drum To Travelling Position.

7. Turn control valve lever (Item 13 PL301) to central position, make sure pump release valve (Item 14 PL301) is fully closed by tightening clockwise. To raise drum, pump handle for and aft until drum begins to raise.

If alternate movement of rams is requires (i.e. to balance lift) move control lever to left or right to give individual ram control.

8. When rams are fully raised, swivel the locking plates (Item 2 – sheet PL 302) to line up with cut out notch in the fixed frame and slowly release hydraulic pressure via pump release valve until both plates are **FULLY SEATED** in the cut out notches, **NOW RETIGHTEN PUMP RELEASE VALVE.**
9. ONLY AFTER Trailer is hitched to towing vehicle, raise Jockey Wheel and rear prop stands to highest Position, clamp securely and connect safety chain (where applicable). Couple up electrical lighting plug and release handbrake.

#### To Lower Cable Drum

10. If the Trailer is to be unhitched from the towing vehicle, the trailer MUST be supported by ensuring the Jockey Wheel is lowered and clamped securely.
11. Lower rear prop stands and clamp securely.
12. Recheck that hand pump release valve is still fully closed in accordance with instruction given in paragraph 8 above.
13. Pump up rams until locking plates (item 2 - sheet PL302) are fully clear of the cut out notch in the fixed frame, then swivel these plates through 180 degrees.
14. Slacken hand pump release valve until drum begins to drop. Adjusting this valve to restrict oil flow back to hydraulic tank can control rate of descent of drum.

### **To Unload Cable Drum.**

15. When Drum is on ground, raise rear prop stands to highest position, clamp securely and connect safety chain clips.\*
16. Wedge drum to prevent it rolling pull trailer from around drum, remove drum spindle locking collars and withdraw spindle from drum and replace into spindle cups on drum lifting frame.
17. Locate Locking Bars back into original position and lock by inserting locking bar clips (Item 3 PL 302).
18. Only After the trailer is hitched to towing vehicle, raise Jockey Wheel to highest position, clamp securely and connect safety chain clips.\*

### **Operator Warning.**

1. Drum Lifting Frame Must Be Fully Raised And Locked In Position Before Towing.
2. Do Not Overload Drum Spindle (see page PL 768)
3. Always Ensure Drum is Fully Locked In Position By Spindle Collars Provided - Before Travelling.

### **Operator Maintenance.**

1. Immediately upon receipt of your new Cable Drum Trailer and also whilst in service we recommend that regular checks be carried out on tyre pressure, and wheel nut tension.
2. Weekly.
  - a) Check tyre pressure
  - b) Check for leaks on hydraulic circuit
  - c) Check light bulbs.

\* Only applicable when fitted

## **Cable Drum Trailer C-700-F**

### **Maintenance.**

1. Immediately upon receipt of your new Cable Drum Trailer and also while in service we recommend that regular checks be carried out on type pressure and wheel nut torque.
2. After 100 miles “into service” it is Essential that with Overrun Braked Trailers-
  - A) Brake lining clearance are readjusted (following “bedding in”)
  - B) All slack is taken out of brake system.

**Note:-** Failure to do this can result in serious damage occurring to the brake system (i.e. Tow Unit damper failure, cable breakage etc.)

#### 3. Weekly

- A) Check tyre pressure
- B) Check for leaks on Hydraulic circuit
- C) Check light bulbs

#### 4. Monthly

- A) Check brake lining clearance and adjust if necessary
- B) Check wheel nut tension
- C) Check tow eye fixing nuts and retighten if necessary
- D) Check suspension unit retaining bolt & re-tighten if necessary
- E) Grease all pivot points on sub frame, tow unit, axle brake levers and brake cable guide tubes.
- F) Check everything in section 3.

### **Recommended Oils and Greases**

Hydraulic Oil = VG 68<sup>2</sup>

Lubrication Grease = Ovoline general purpose (or equivalent)

### **Hydraulic Hand Pump Maintenance**

The only maintenance required is to occasionally check the hydraulic oil level. However if after a period of time, seals become worn, then a replacement seal kit is available.

### **Technical Data**

Wheel nuts	Size M18	Torque 323 Nm
Tyre Pressure	97psi	

## **Cable Drum Trailer C-700-F Technical Data**

### **Lifting System.**

Single line system from hand pump to hydraulic drum lift cylinders with flow control valve situated above hand pump.

Pressure required to raise drum – 716psi (48.7 Bar).

### **Note.**

The pressure required to lift the cylinders off their locking plates is the same as for above but then oil is exhausted from the cylinders back to the tank by gravity feed exerted by the drum weight during lowering operation.

### **Flow.**

When operating the system described above the flow of the hydraulic oil may be variably controlled by means of the pressure release valve on the front of the hand pump.

### **Hand Pump Data.**

1. Capacity of Tank	3.41ltrs (6 pint) approx.
2. Delivery/Single stroke lever	7.137cm <sup>3</sup> (0.435cu ins.)
3. Working volume of fluid to operate system	2.273ltrs (4 pint).
4. Pump relief pressure setting.	2500psi (170 Bar).

### **Cylinder Data.**

1. Bore	57mm (2 ¼”) diameter single acting.
2. Rod diameter	38mm diameter
3. Stroke	368mm – 14.5”

### **Suspension Data.** (Hollow Rubber Spring Type).

Maximum load per spring – 1361Kg (3000lbs)

Maximum deflection per spring – 63mm (2.5”)

### **Recommended oils and Greases.**

Hydraulic Oil = VG 68<sup>2</sup>

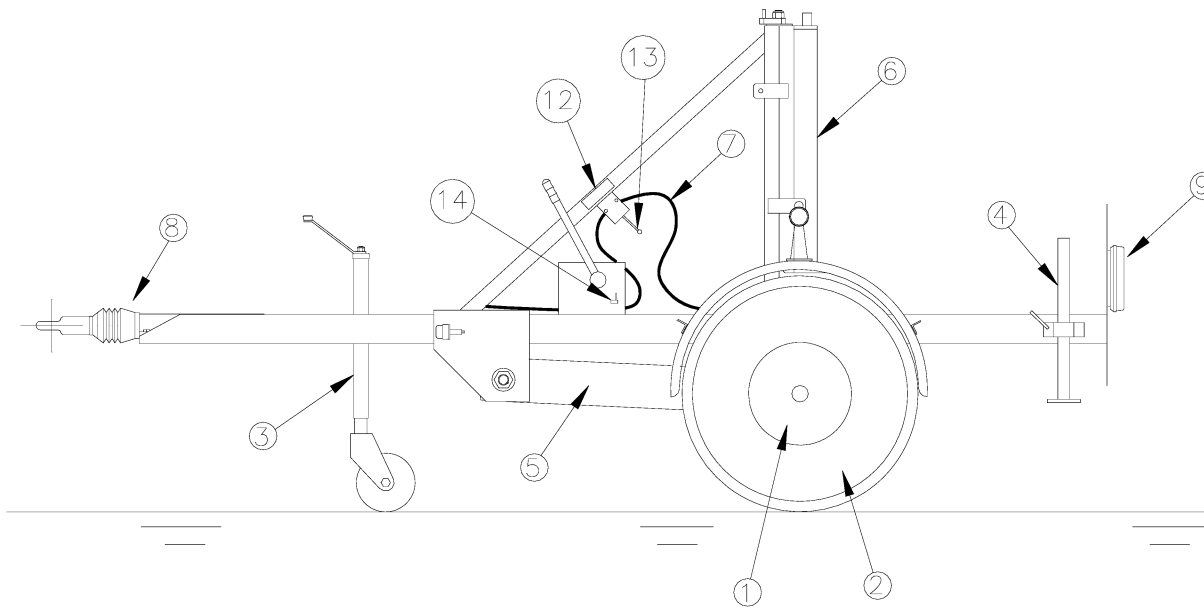
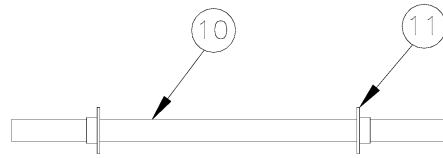
Lubricating Grease = Ovoline 75 general purpose (or equivalent)

Wheel Nuts Size = M18 Torque = 323 Nm

Tyre Pressure = 97psi.

TRAILER CHASSIS NUMBER MUST ALWAYS BE QUOTED WHEN ORDERING SPARES

PART'S LIST

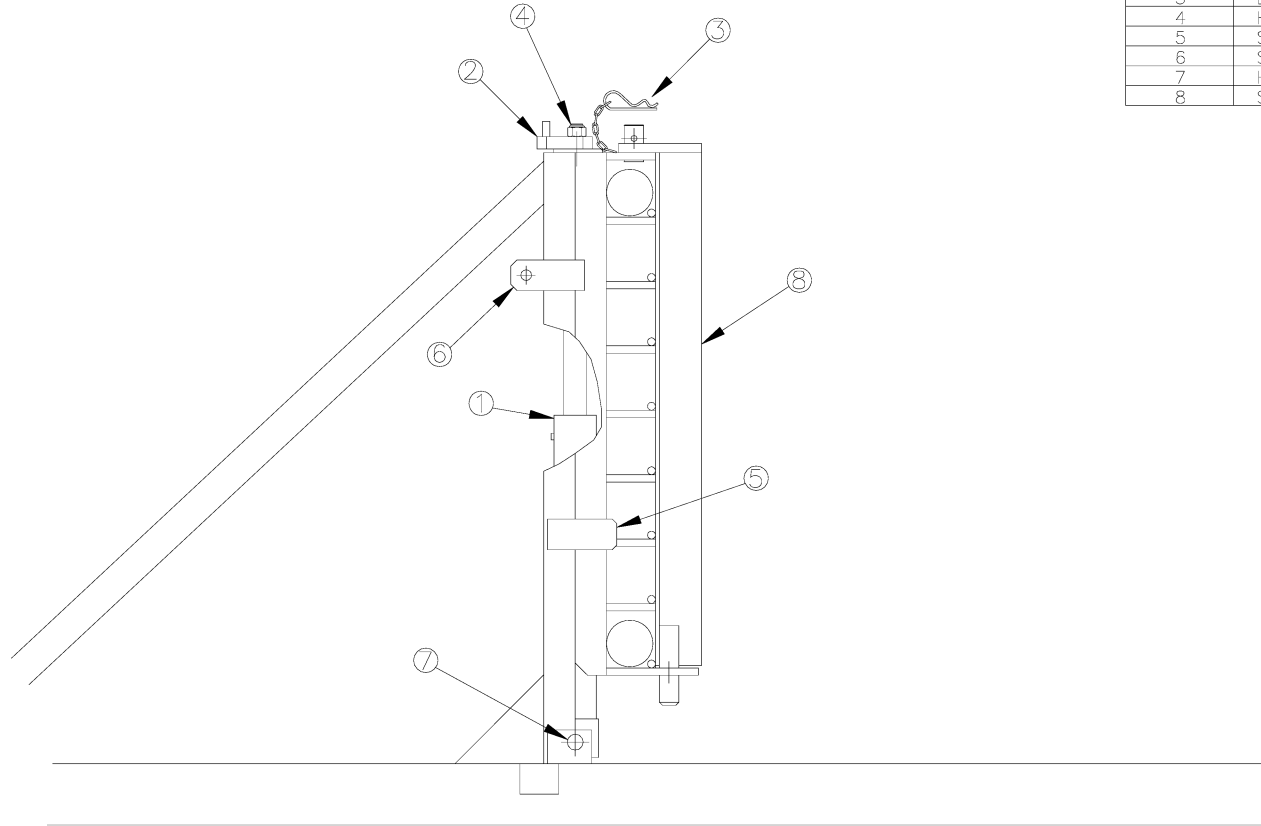


ITEM	DESCRIPTION
1	WHEELS
2	TYRES
3	JOCKEY WHEEL
4	PROP STAND
5	WHEEL ARM
6	SLIDE LIFT
7	HYDRAULIC SYSTEM
8	BRAKE SYSTEM
9	ELECTRICAL SYSTEM
10	SPINDLE
11	SPINDLE COLLAR
12	HYDRAULIC INSTRUCTION
13	CONTROL VALVE LEVER
14	PUMP RELEASE LEVER

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PART'S LIST

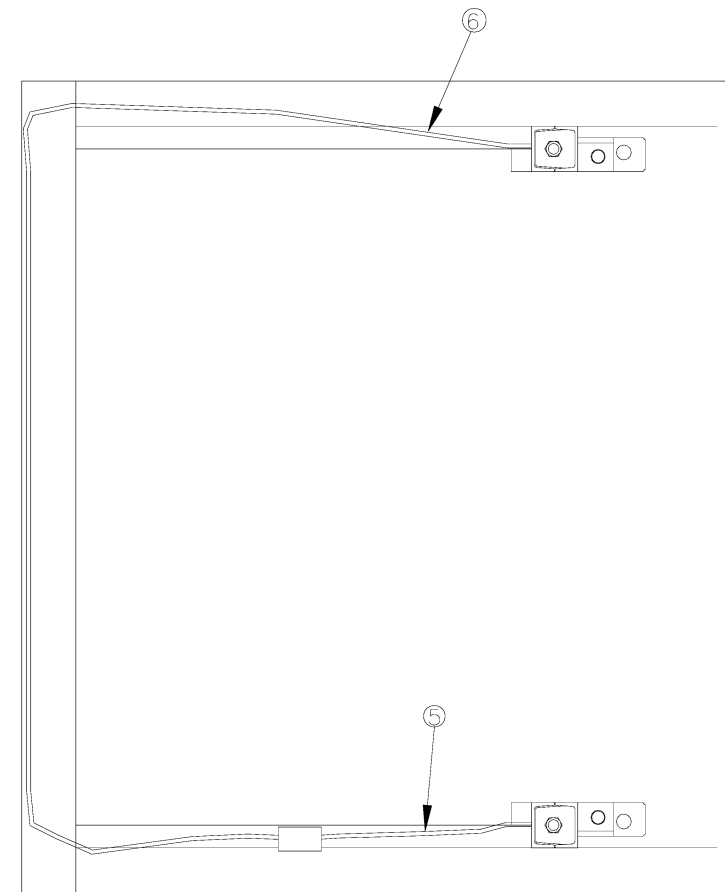
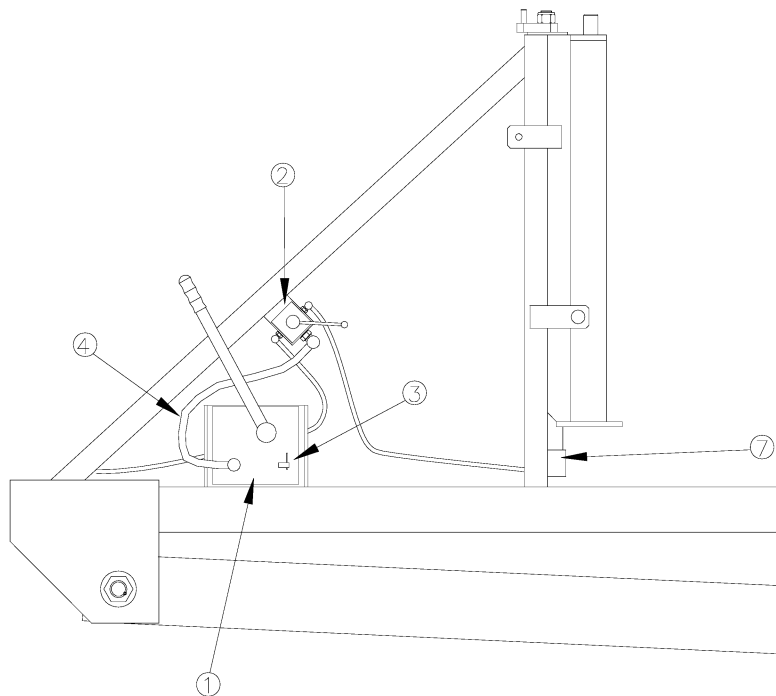
ITEM	DESCRIPTION
1	HYDRAULIC RAM
2	RAM LOCK
3	LOCKING BAR CLIP/CHAIN
4	HYDRAULIC RAM LOCK NUT
5	SLIDE RETAINER ROLLER
6	SLIDE RETAINER ROLLER
7	HYDRAULIC RAM PIVOT PIN
8	SPINDLE LOCKING BAR



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PART'S LIST

ITEM	DESCRIPTION
1	HYDRAULIC PUMP
2	CONTROL VALVE
3	PUMP RELEASE VALVE
4	MAIN FEED HOSE
5	SHORT RAM HOSE
6	LONG RAM HOSE
7	HYDRAULIC RAM

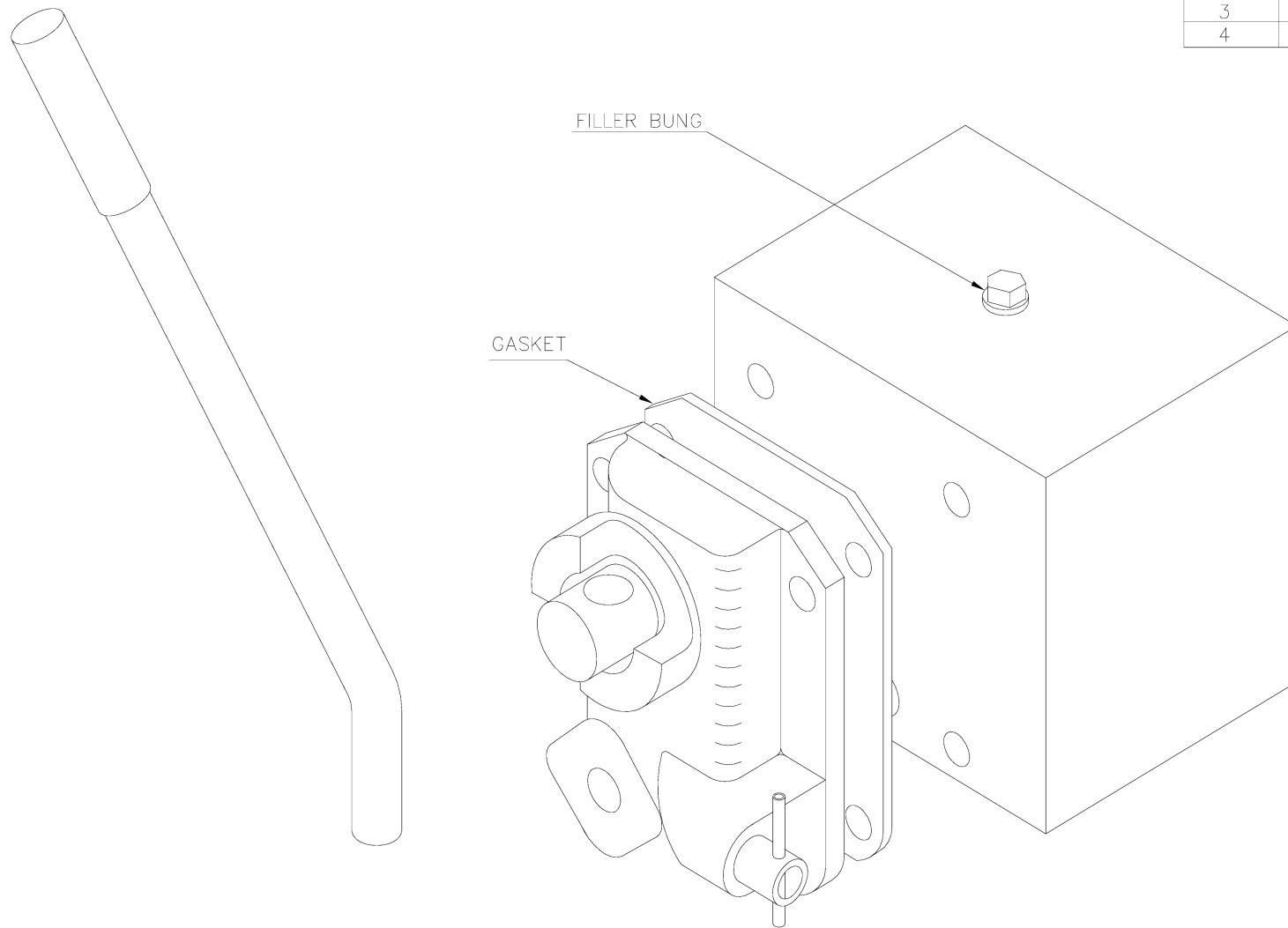




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PART'S LIST

ITEM	DESCRIPTION	REF
1	PUMP & TANK COMPLETE	HP2 BT
2	PUMP FRONT ONLY	HP2 LT
3	PUMP SEAL KIT	0102/SK
4	HANDLE & GRIP	0101/08



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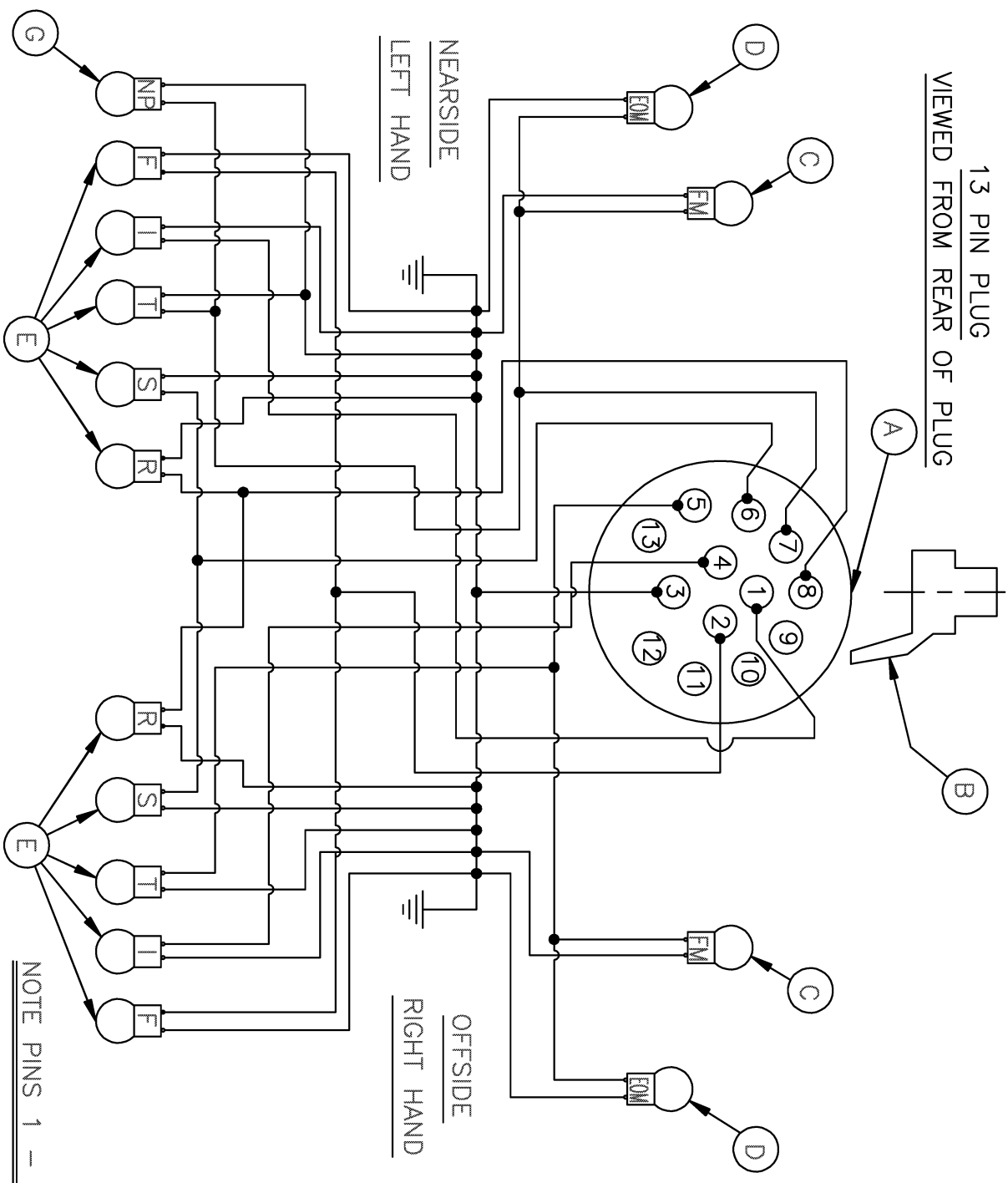
PART'S LIST

ITEM	DESCRIPTION
1	PISTON SEAL
2	WIPER SEAL
3	GLAND SEAL



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PART'S LIST



ITEM	DESCRIPTION
A	13 PIN PLUG
B	OPTIONAL 13 PIN-7 PIN CONVERTER
C	FRONT MARKER <small>WHERE FITTED</small>
D	END OUTLINE MARKER <small>WHERE FITTED</small>
E	REAR LIGHT CLUSTER
G	NUMBER PLATE LIGHT

13 PIN PLUG COLOUR CODE	
1	YELLOW - N/S INDICATOR
2	BLUE - FOG
3	WHITE - EARTH
4	GREEN - O/S INDICATOR
5	BROWN - O/S SIDE&TAIL
6	RED - STOP
7	BLACK - N/S SIDE&TAIL
8	PINK - REVERSE
9	ORANGE - BATTERY SUPPLY
10	GREY-BATT IGN SWITCHED
11	WHITE/BLACK-EARTH FOR 10
12	WHITE/BLUE - RESERVED
13	WHITE/RED-EARTH FOR 9

NOTE PINS 1 - 8 ONLY USED ON TRAILER LIGHTS

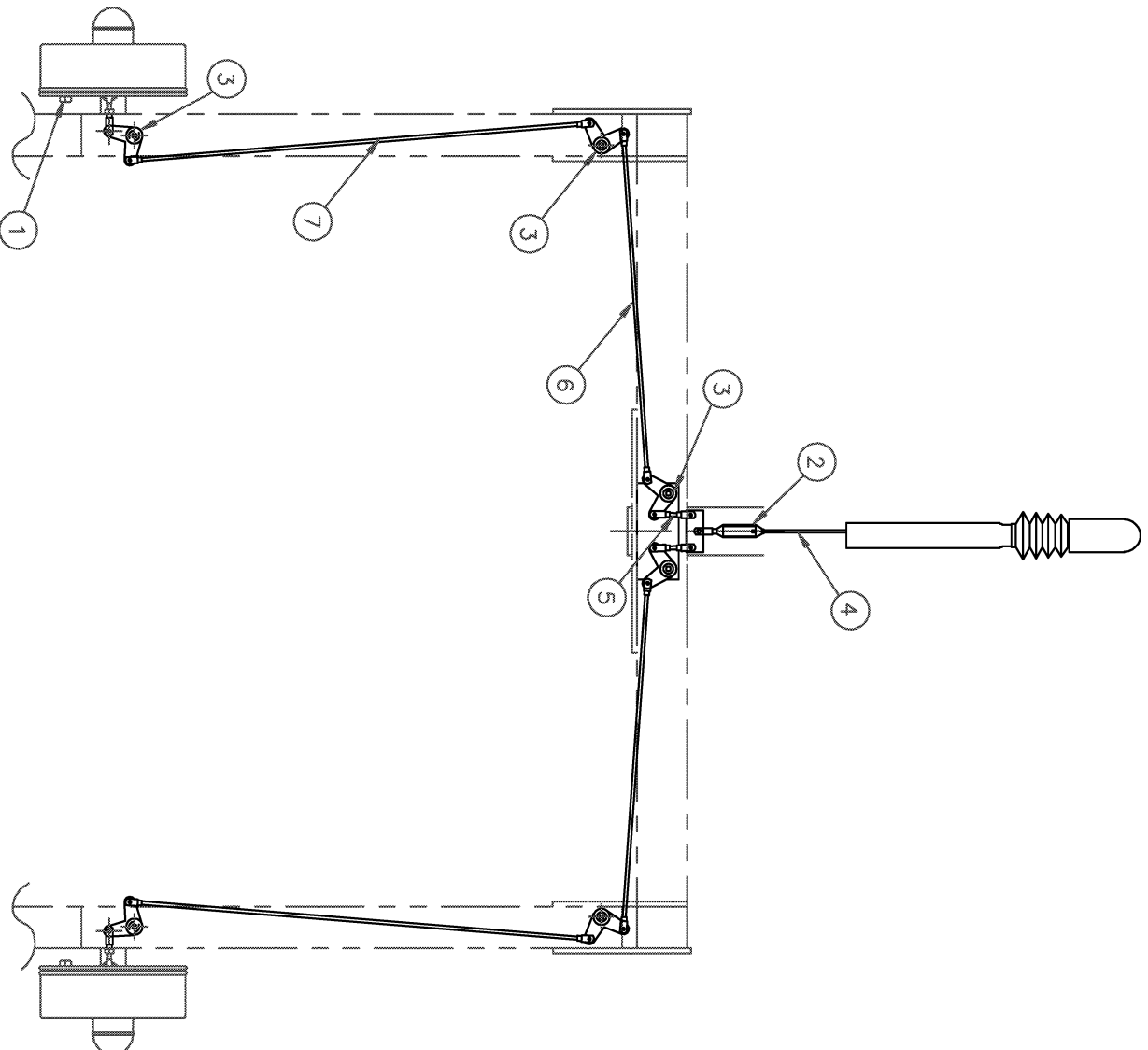
ELECTRICAL SYSTEM (TO ISO 11446)

SHEET No:- PL1050

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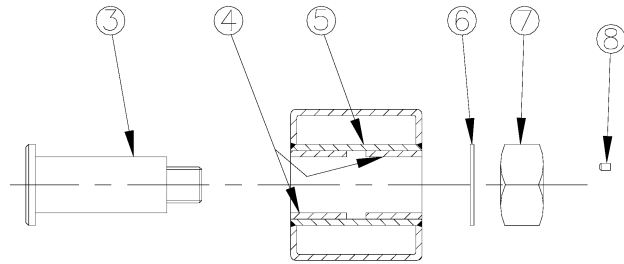
PART'S LIST

ITEM	DESCRIPTION
1	BRAKE ADJUSTER
2	TURN BUCKLE
3	BRAKE CASTING
4	BRAKE CABLE
5	SMALL BRAKE ROD
6	MEDIUM BRAKE ROD
7	LONG BRAKE ROD



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PARTS LIST



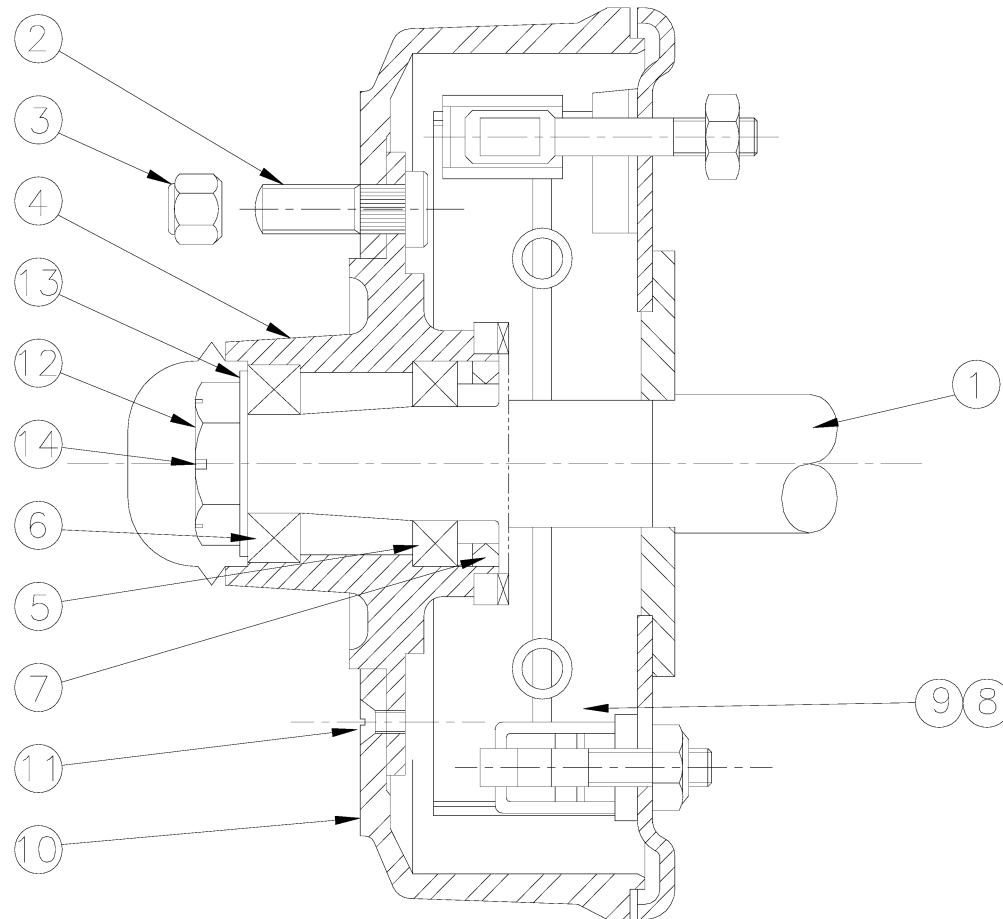
SECTION 'A'- 'A'

ITEM	DESCRIPTION
1	HUB & BRAKE ASSY
2	SUSPENSION UNIT
3	PIVOT PIN
4	PIVOT PIN BUSH
5	PIVOT PIN BOSS
6	PIVOT PIN WASHER
7	PIVOT PIN NUT
8	GRUB SCREW



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PART'S LIST



ITEM	DESCRIPTION
1	STUB AXLE
2	WHEEL STUD
3	WHEEL NUT
4	HUB
5	INNER BEARING
6	OUTER BEARING
7	OIL SEAL
8	L.H. BRAKE ASSEMBLY
9	R.H. BRAKE ASSEMBLY
10	BRAKE DRUM
11	BRAKE DRUM RETAINER
12	AXLE NUT
13	AXLE WASHER
14	SPLIT PIN