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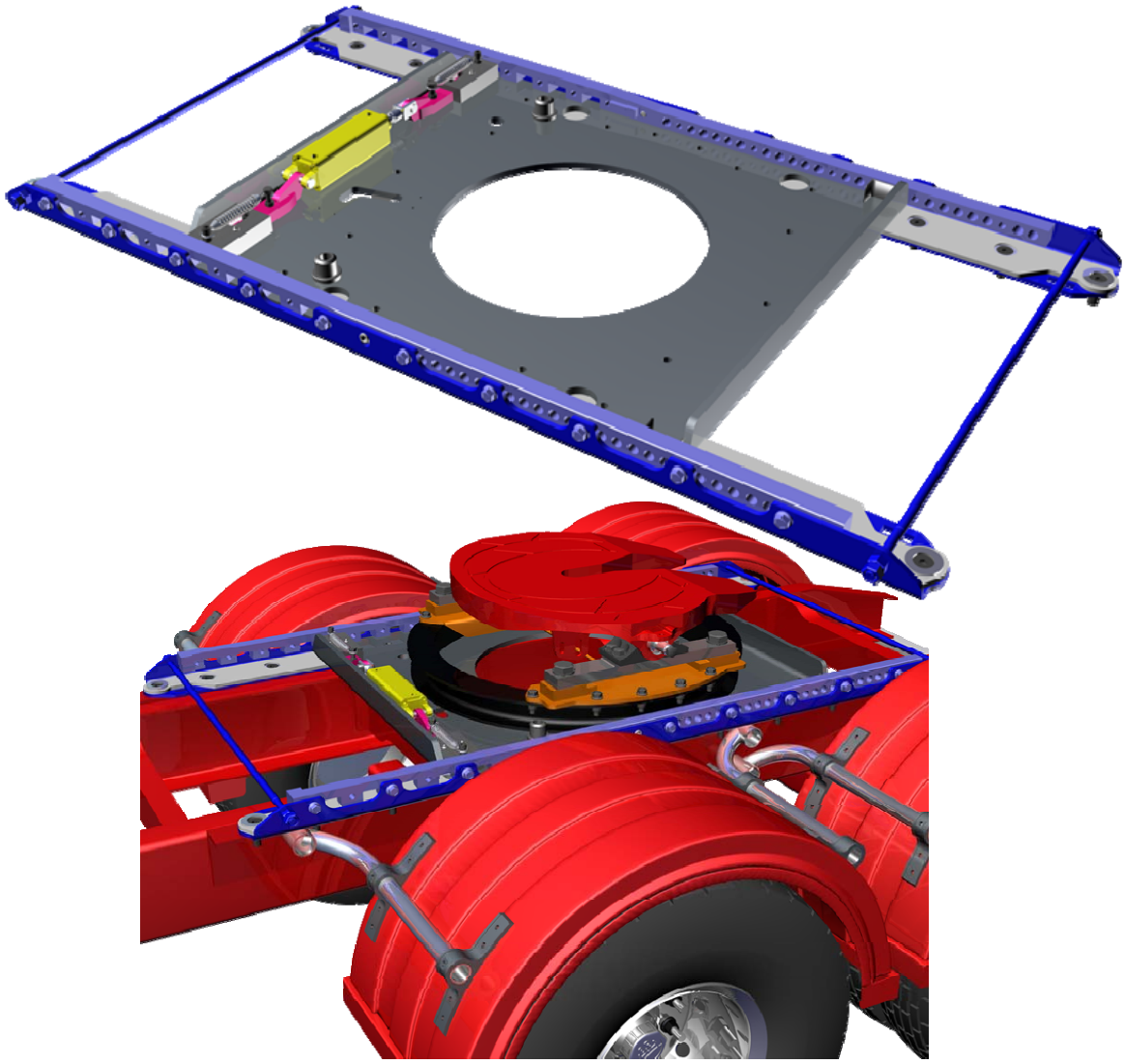
ELPHINSTONE TURNTABLE SLIDER
Rack & Wedge

P/N 30/07499812EE

INSTALLATION MANUAL
SERVICE MANUAL
SPARE PARTS MANUAL



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SLIDER INSTALLATION TO VEHICLE - 30/0749XXX – 952mm Rack & Wedge Type

DO NOT UNDO THE MOUNTING ANGLE TIE RODS AT THE FRONT OR REAR OF THE SLIDER

1. Determine the centre of the rear drive wheel and mark it onto the chassis. (See diagram)
   All measurements will be taken from this point.

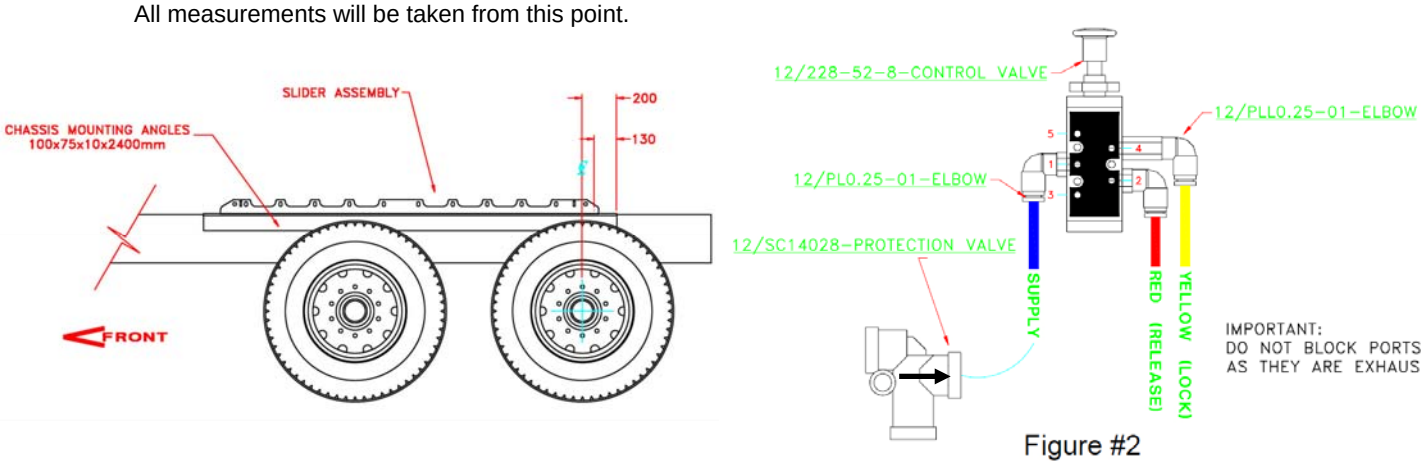

Figure #2

2. If not already fitted. Fit chassis mounting angles 100 x 75 x 10mm x 2400mm long so they sit 5mm above the top of the chassis. (100mm edge of angle sits against chassis)
   Start them from a point 200mm behind the centre line marked on the chassis, and bolt them in place at approximately 200mm intervals maximum using 5/8"UNF Grade 8 Flange Bolts/Nuts or M16 Flange Bolts/Nuts of an equivalent grade. Torque them to 200Nm (147lb/ft) Pick up on existing holes in the chassis wherever possible.
   This will allow the 5th Wheel to be a approximately 50mm behind the centre of the drive wheels when the base plate is moved to its rear most position on trucks with drive wheel centres of about 1320mm.
   In special applications the mounting angles can be put further back if there is a requirement for the 5th Wheel to be even further behind.

3. Scribe a line across the chassis mounting angles 130mm forward from the rear. Set the slider assembly down so the very rear set of countersunk holes in the mounting angles align with the 130mm line and the slider is sitting squarely on the chassis mounting angles from front to rear.
   Scribe or mark the four (4) bolting down countersunk holes to be used at the ends of the slider mounting angles. Move the slider assembly out of the way and then drill the four (4) marked places 19.05 – 19.50mm diameter.

4. Re-position the slider assembly back over the four (4) holes just drilled, then use four (4) of the 3/4"UNF x 2-1/2" long countersunk bolts and flange nuts supplied in the mounting kit to bolt the slider angles down at each end.
   Using either an air supply or suitable dolly, move the air cylinder lock wedges back into the release position so they clear the racks.

5. With the base plate now free to move backwards and forwards. Mark the remaining mounting holes using the mounting angles as a template, then move the slider assembly out of the way again and finish drilling the mounting holes 19.05 – 19.50mm. Re-position the slider and finish bolting it down through all holes. Torque ¾"UNF bolts to 360Nm (265lb/ft)

6. Move the base plate to its rear most position, then feed one end of the coils of red and yellow air line from under the base plate up through the slot cut into it and under the ballrace, (when fitted) then connect the ends to the elbows fitted in the air cylinder. ***The Red line (release)*** connects at the piston rod end. ***The yellow line (lock)*** connects at the opposite end.
   Tie the lines together and onto the base plate through the holes at the cut out slot using cable ties from the mounting kit.
   Run the remaining air lines in a sweeping curve towards the inside of the right hand chassis rail and tie them down to the inside of the chassis rail level with the front of the base plate.

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7. Move the base plate backwards and forwards over its full travel checking that the air lines do not kink or foul on any part of the vehicle. Run the remaining lengths of air line along the inside of the chassis, tying them down at intervals of 100mm.
   If fitting a slider that will be operated by a push pull switch (See drawing X-073973) run the air lines up into the truck cabin or to a suitable location outside the cab.
   When inside the truck cabin, take note of the physical size of the push pull switch and its fittings. Select a mounting position that will provide for ease of operation and accessibility.
   Make sure the red and yellow air lines are connected into the ports on the switch as shown on drawing X-073973.
   Do not block off ports 3 and 5 on the push pull switch as they are exhaust ports.
   If the slider is going to be operated by an electric solenoid valve, (Drawing X-073972) see if it is possible to mount the solenoid valve inside the truck cabin. If not, mount it inside the chassis rail in a position where it is accessible and protected. Connect the red and yellow air lines to the solenoid valve as shown on drawing X-073972.

8. **IMPORTANT** For air supply to the push pull switch or the solenoid valve. Install the pressure protection valve supplied with the slider into a spare port on one of the trucks air tanks. Ensure it is fitted with the Arrow on the valve pointing in the direction of air flow (IE Away from the air tank)

9. After all connections have been completed, start the vehicle engine to build up the air supply and check there are no connection leaks or kinks in the air lines.
   Operate the slider controls to make sure the locking wedges fully lock and release in all positions.

SLIDER ADJUSTMENTS

The slider base plate and mounting angles and racks have been pre-set. But if it is found that further adjustment is required, then proceed in the following manner.

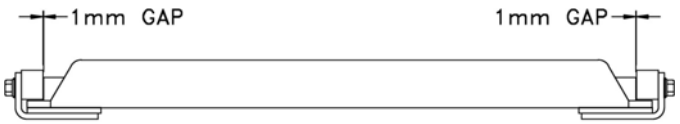
1. Move the slider base plate to its rear most position and lock the wedges in place.

2. Loosen off the five (5) flange bolts on the sides of both mounting angles just far enough to allow the front inner racks to self locate on the wedges. Re-tighten the third (3rd) pair of bolts from the front just firm enough to hold the racks in place.

3. Release the wedges again and move the base plate to its most forward position. Lock the wedges again so the racks self locate then re-tighten the front pair of bolts.

4. Release the wedges and move the base plate to its rear most position. Lock the wedges to check they still locate okay and then re-tighten the third (3rd) pair of bolts.

5. Re-tighten all the remaining bolts down each side of the mounting angles. Maximum 200Nm (147 lb/ft)
   Make sure the 1mm gap is maintained between the racks and the front and rear base plate guides during operation.



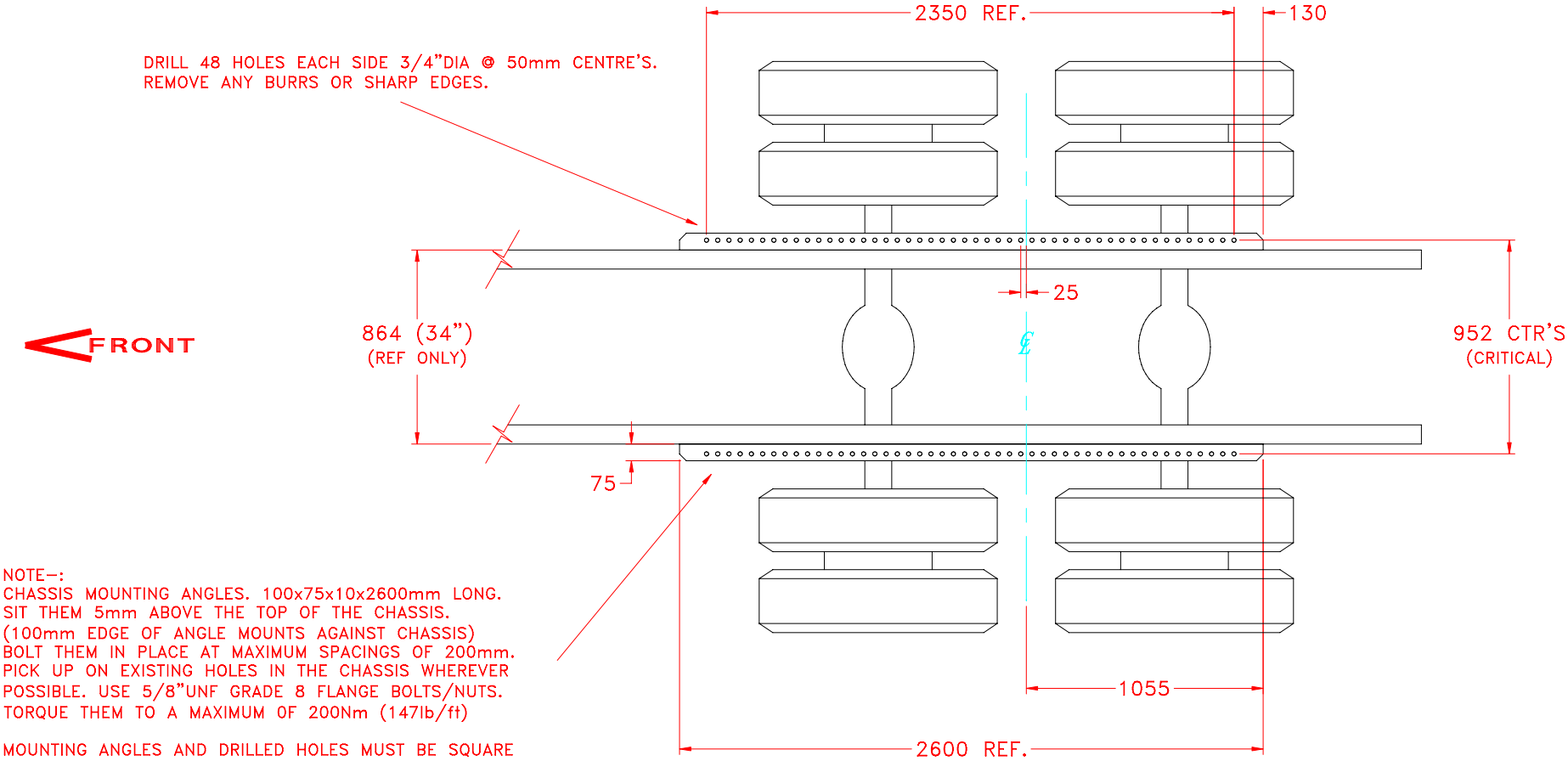
FRONT VIEW

6. Check the operation of the slider fully loaded and again one (1) week later after the vehicle has been operating.

7. Visually inspect the slider each week to check that its operating okay and the clearances shown above are being maintained. Make sure locking wedges are kept greased. Do not grease the nylon wear pads under the base plate.

8. Every six (6) months or 50,000km check that all ¾" bolts holding the slider in place and the chassis mounting angles are tight by re-torquing them to 360Nm (265 lb/ft).

DRILL 48 HOLES EACH SIDE 3/4"DIA @ 50mm CENTRE'S.
REMOVE ANY BURRS OR SHARP EDGES.



NOTE–:
CHASSIS MOUNTING ANGLES. 100x75x10x2600mm LONG.
SIT THEM 5mm ABOVE THE TOP OF THE CHASSIS.
(100mm EDGE OF ANGLE MOUNTS AGAINST CHASSIS)
BOLT THEM IN PLACE AT MAXIMUM SPACINGS OF 200mm.
PICK UP ON EXISTING HOLES IN THE CHASSIS WHEREVER POSSIBLE. USE 5/8"UNF GRADE 8 FLANGE BOLTS/NUTS.
TORQUE THEM TO A MAXIMUM OF 200Nm (147lb/ft)

MOUNTING ANGLES AND DRILLED HOLES MUST BE SQUARE TO EACH OTHER ACROSS THE CHASSIS.

NOTE–:
SLIDER ASSEMBLY BOLTED DOWN VIA THE FRONT HOLES ALLOWS THE 5th WHEEL IN ITS REAR MOST POSITION TO TRAVEL 50mm BEHIND THE BOGIE CENTRELINE.

BOLTING IT DOWN VIA THE REAR HOLES ALLOWS THE 5th WHEEL TO TRAVEL 250mm BEHIND THE BOGIE CENTRELINE.

REVISION

REPLACED BY: X/

ELPHINSTONE ENGINEERING AUST. PTY. LTD.
TASMAN HIGHWAY TRIABUNNA TASMANIA 7190 PH(03) 6257 3242 FAX(03) 6257 3573

CHASSIS MOUNTING
952mm RACK & WEDGE TYPE SLIDER
CHASSIS MOUNTING ANGLE DETAIL

DRAWN: B.M.T. DATE: 15-09-06
SCALE: 1:
REVISION: BY:
SEE DIRECTORY: DRAWING2–: W11
DRAWING No. 3/110502
SHEET 1 OF 1
ASSEMBLED INTO: X/

ELPHINSTONE
WEIGHING SYSTEMS
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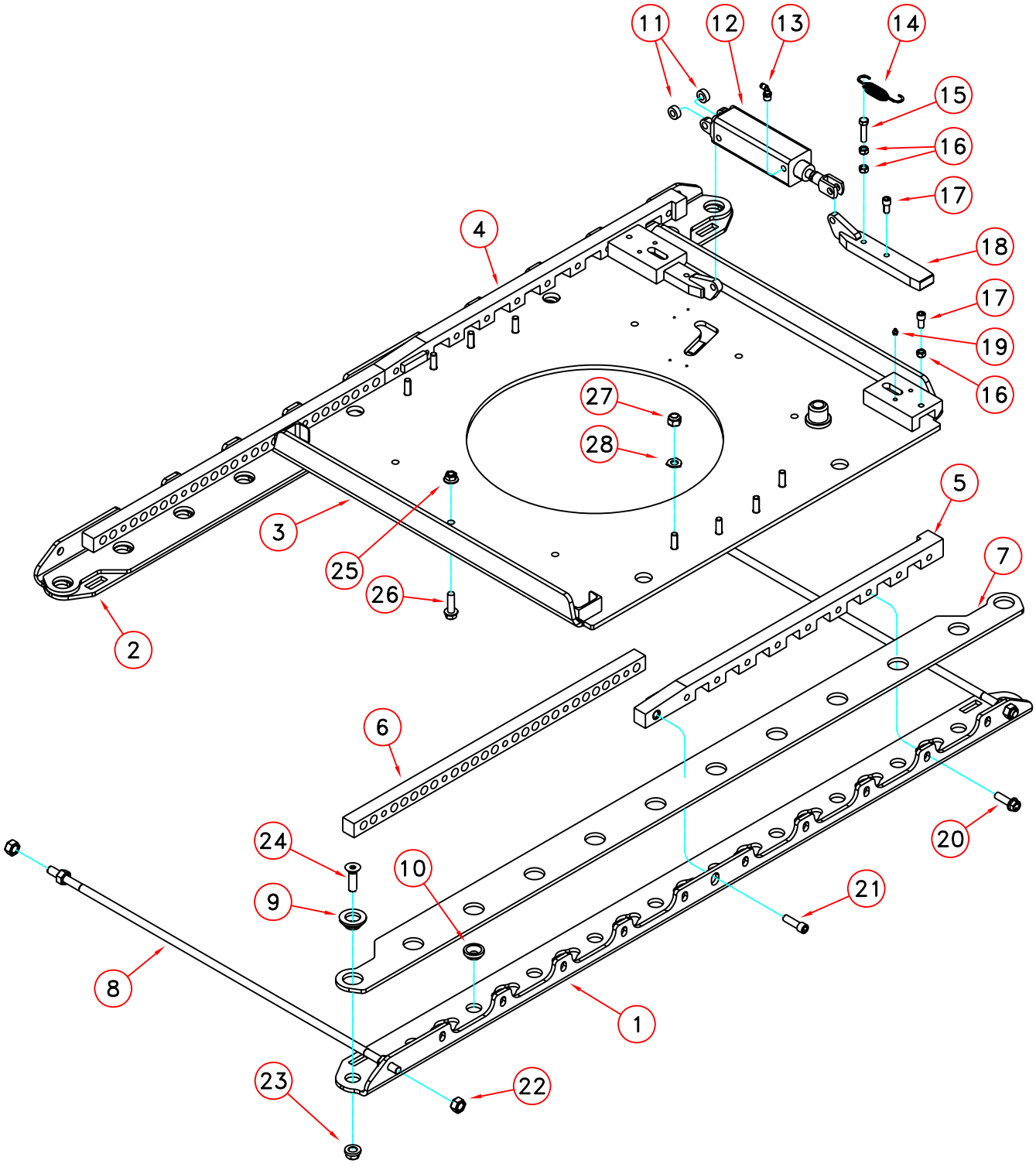
SLIDER ASS'Y – BARE

ELPHINSTONE – 952mm RACK & WEDGE TYPE
12mm BASE PLATE – BALLRACE 5th/WHEEL



PARTLIST.DOT

COMPONENT: **SLIDER ASS'Y - TRUCK - ELPHINSTONE - 952mm RACK & WEDGE TYPE**

INDE	PART NO.	QTY	DESCRIPTION	SIZE
	30/07499812EE	**1**	**SLIDER ASS'Y. Bare. 12mm Base Plate. Suit Ballrace/5th Wheel Consists Of Index No's 1 - 29**	
1	30/074902	1	ANGLE. Right Hand	
2	30/074901	1	ANGLE. Left Hand	
3	30/07499612EE	1	BASE PLATE ASS'Y. Bare. Elphinstone Engineering	
4	30/074905	1	RACK. Front Section. Left Hand	
5	30/074904	1	RACK. Front Section. Right Hand	
6	30/073944	2	RACK. Rear Section	
7	30/074906	2	WEAR PAD. Nylon	
8	30/073948	2	TIE ROD	
9	30/074908	4	WASHER. C/Sunk. Wear Pad Ends	
10	30/074907	20	WASHER. C/Sunk. Mounting Angles	
11	30/073232	2	SPACER. Nylon	
12	12/DNC-63-125-PPV-A	1	CYLINDER. Pneumatic	
13	12/PL0.25-03	2	ELBOW. 90°	1/4"Tube x 3/8"NPT
14	10/0539726030	2	SPRING. Booster	
15	90/782008	2	BOLT. Grade 8. Zinc Plated	1/2"UNC x 2"
16	90/789908	6	NUT. Grade 8. Zinc Plated	1/2"UNC
17	90/781008SH	4	SCREW. Socket Head Cap	1/2"UNC x 1"
18	30/073967	2	KEY ASS'Y. Sliding. Bare	
19	18/RH29	4	GREASE NIPPLE. Straight	1/8"BSP
20	90/882010F	20	BOLT. Flange. Grade 8.8 Trim to 46mm	5/8"UNF x 2"
21	90/782010SH	2	BOLT. Socket Head Cap	5/8"UNC x 2"
22	90/789912	8	NUT. Grade 8	3/4"UNC
		1	**MOUNTING KIT. Elphinstone Engineering. Consists Of Index No's 23 – 29**	
23	90/889912F	24	NUT. Flange. Grade 8	3/4"UNF
24	90/882512CS	24	BOLT. Countersunk. Grade 8	3/4"UNF x 2-1/2"
25	90/889910F	6	NUT. Flange. Grade 8	5/8"UNF
26	90/882010F	6	BOLT. Flange. Grade 8	5/8"UNF x 2"
27	90/789810	8	NUT. Nyloc. Zinc Plated	5/8"UNC
28	90/970010	8	WASHER. Hard Flat Structural	5/8"
29	14/TY525MX	1	CABLE TIES (100/Pack) *Not Shown*	

Not Part Of The Bare Slider Assembly Above

PLUMBING KIT. Solenoid Valve Operated. Refer To Drawing/Text Sheet X-073972

PLUMBING KIT. Push/Pull Switch Operated. Refer To Drawing/Text Sheet X-073973

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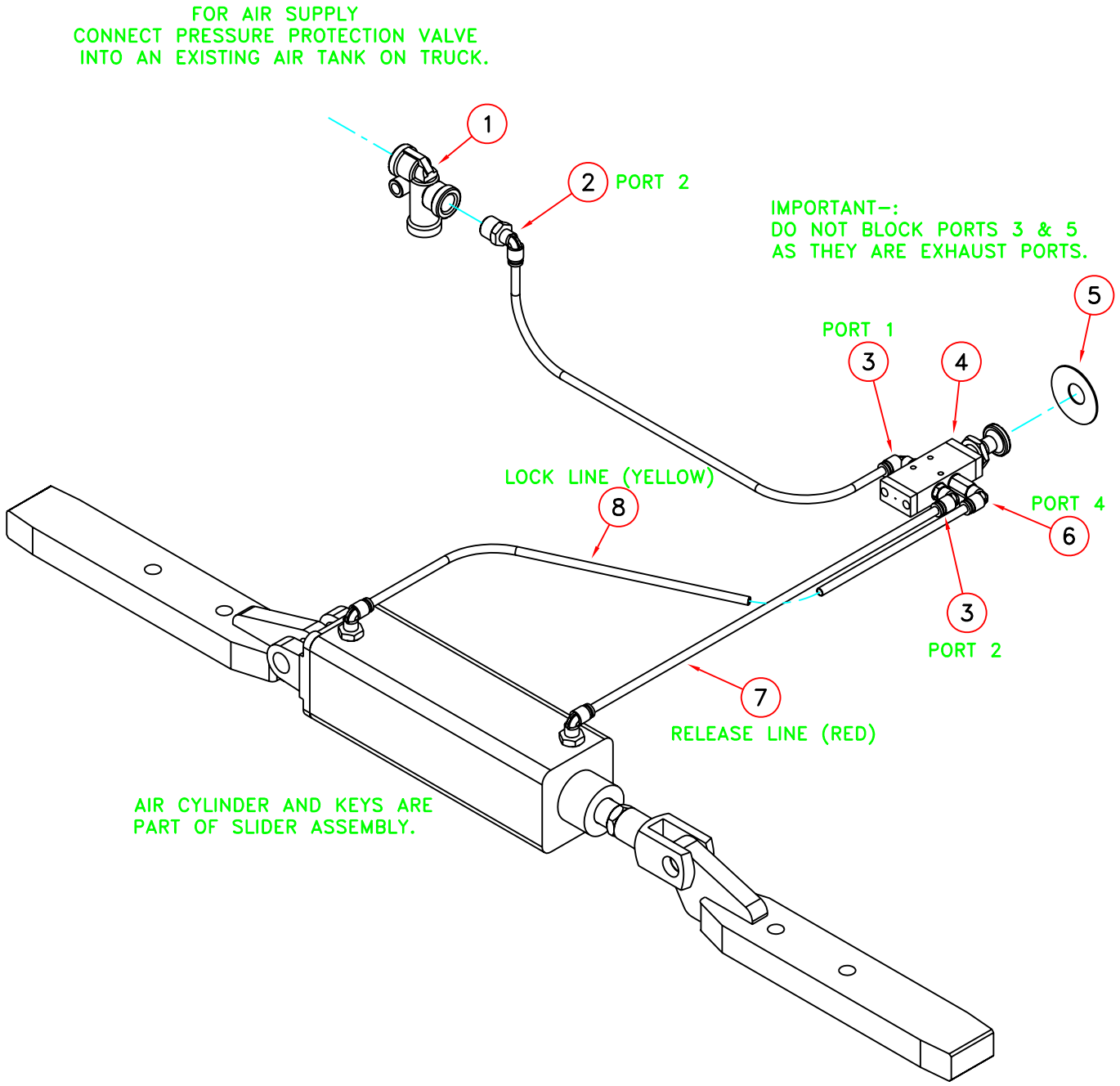
PLUMBING KIT. PUSH/PULL SWITCH
RACK & WEDGE TYPE TRUCK SLIDER



DIRECTORY - DRAWING2 - X - X-073973
SHEET 1 OF 2

PARTLIST.DOT

COMPONENT: **TRUCK SLIDER - RACK & WEDGE TYPE**

INDEX	PART NO.	QTY	DESCRIPTION	SIZE
	30/073973	**1**	**PLUMBING KIT. Push/Pull Switch Consists Of Index No's 1 - 9**	
1	12/SC140280	1	VALVE. Pressure Protection	3/8"NPT Ports
2	12/PL0.25-03	1	ELBOW. 90°	1/4"Tube x 3/8"NPT Male
3	12/PL0.25-01	2	ELBOW. 90°	1/4"Tube x 1/8"NPT Male
4	12/228-52-8	1	VALVE. Slider Control	1/8"NPT Female
5	12/073912	1	DECAL. Slider. Pull To Release	
6	12/PLL0.25-01	1	ELBOW. Long. 90°	1/4"Tube x 1/8"NPT Male
7	12/T141-4YEL	11mtr	TUBE. Nylon 12 (Red)	1/4"
8	12/T141-4RED	11mtr	TUBE. Nylon 12 (Yellow)	1/4"
9	X-073973	1	DRAWING. Exploded View/Text Sheet	

ELPHINSTONE
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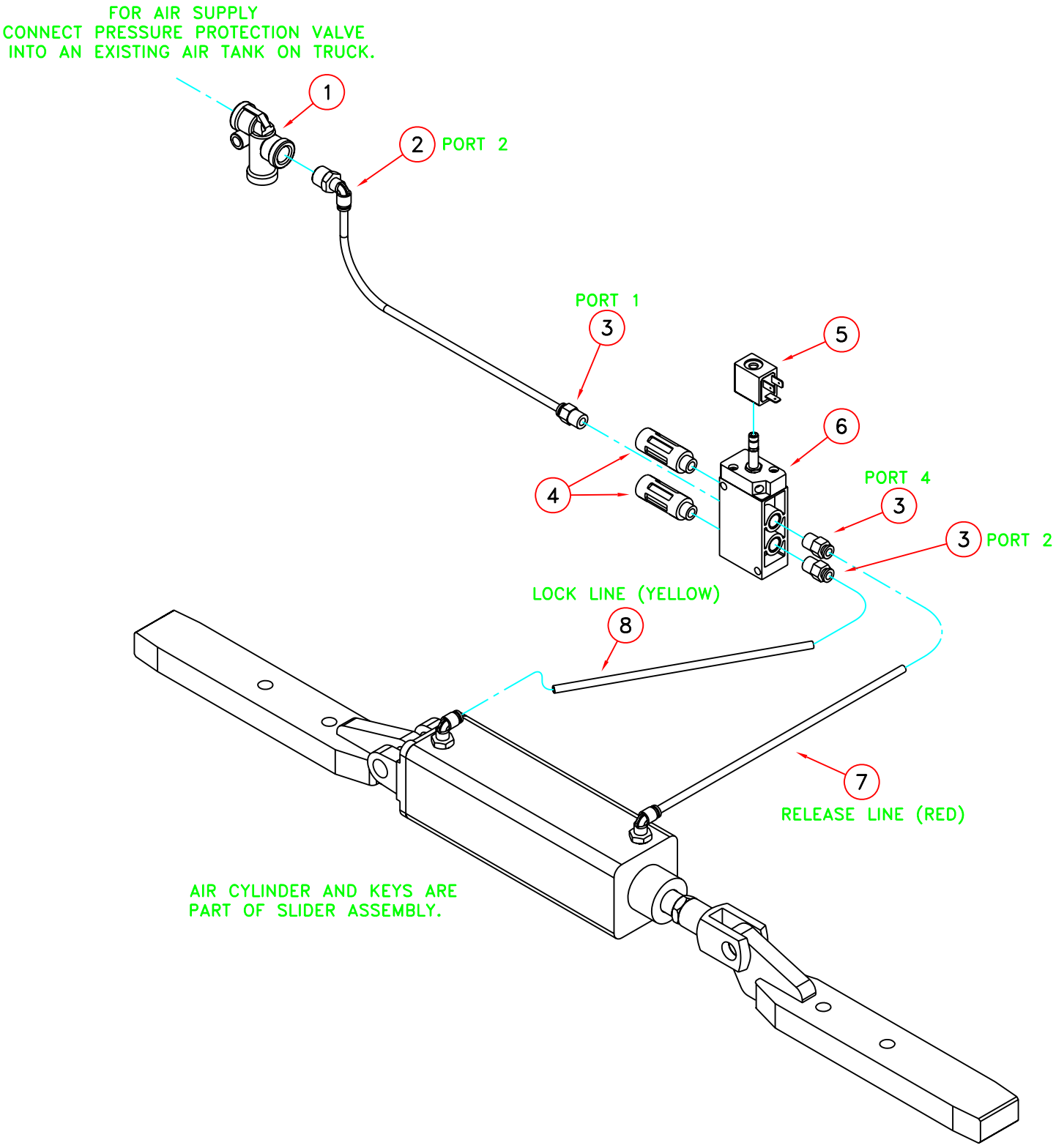
LOGGING TRAILERS

PLUMBING KIT. SOLENOID OPERATED
RACK & WEDGE TYPE TRUCK SLIDER



DIRECTORY - DRAWING2 - X - X-073972
SHEET 1 OF 2

PARTLIST.DOT

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7	12/T141-4YEL	11mtr	TUBE. Nylon 12 (Red)	1/4"
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9	X-073973	1	DRAWING. Exploded View/Text Sheet	

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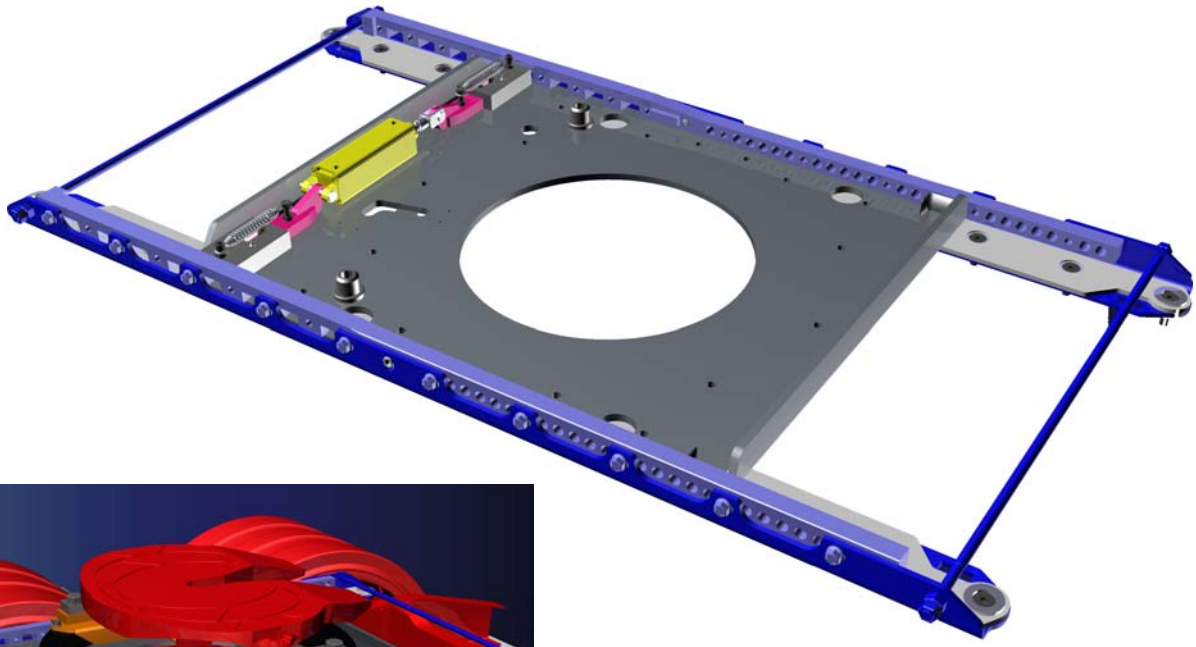
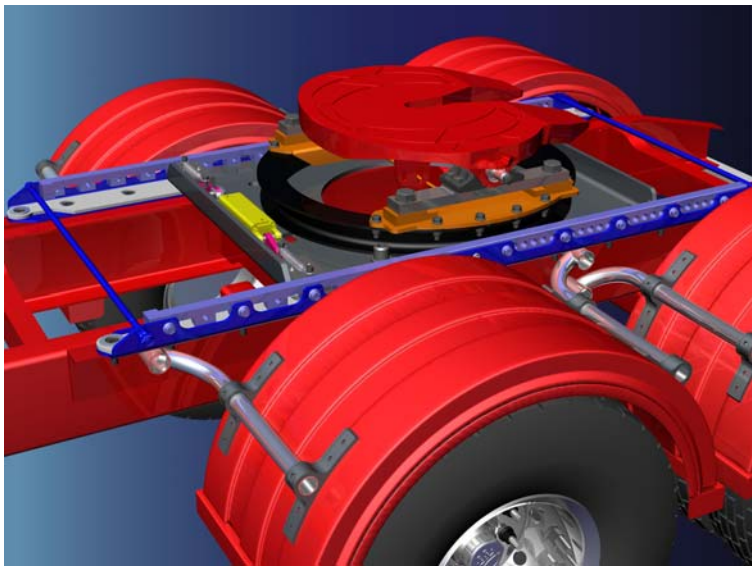
PRODUCT SPECIFICATION

ELPHINSTONE TURNTABLE SLIDER





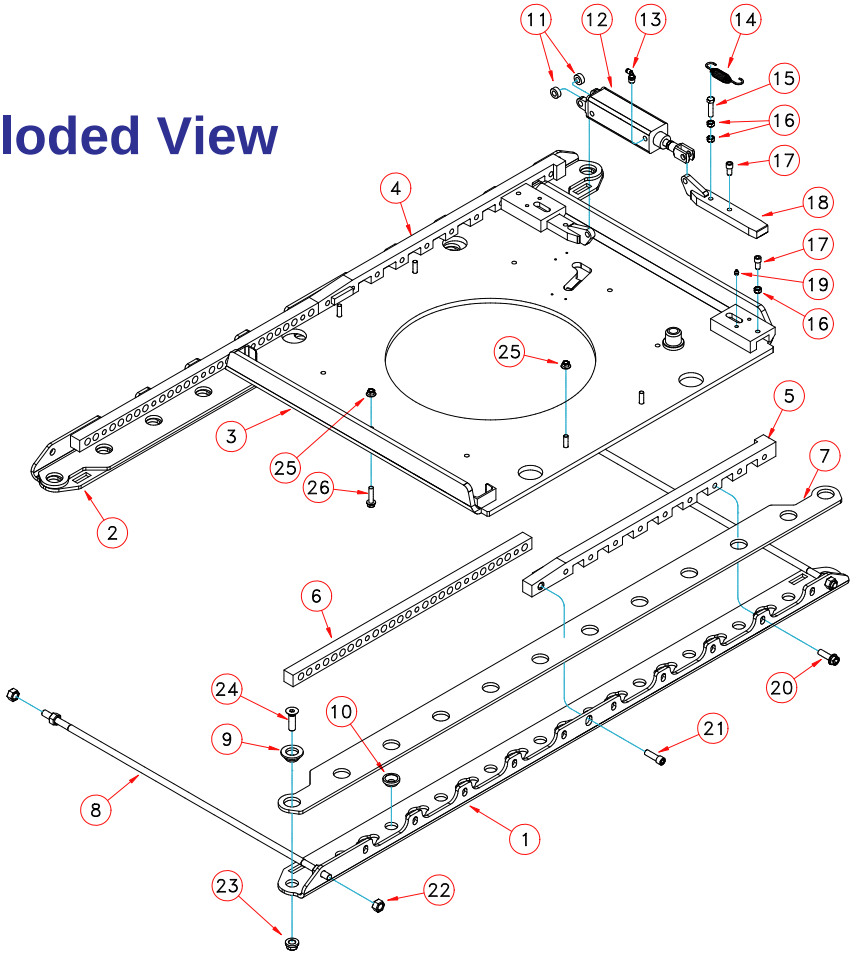
Features:

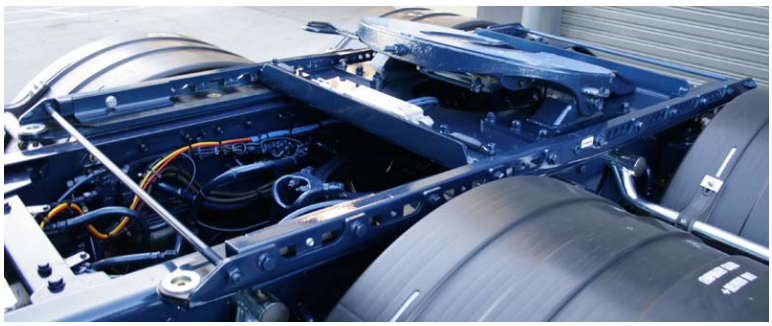
- Light Tare Weight - From 229kg
- Low Height - 20mm
- D-Rated 200kN to 270kN
- Spring loaded safety lock
- Can be moved when fully laden
- 700mm of Travel
- Replaceable Nylon Slides
- Proven Design over Millions of Kilometres
- Models to Suit All Trucks
- Pre-Assembled and Adjusted

Options:

- Drill Pattern to Suit Narrow Width Chassis
- Solenoid or Direct Air Activation Valves
- Ballrace or Fixed Turntable
- Loadcells with Trunnions to Suit Most Turntables
- Suits low height or standard ballraces

Exploded View





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