

INSTALLATION, OPERATION, MAINTENANCE, & PARTS LISTS MANUAL

MODEL 1715PL & 1721PL ARM TYPE PLATFORM CONVERSION HOISTS



IF INCORRECTLY USED, THIS EQUIPMENT CAN CAUSE SEVERE INJURY. THOSE WHO USE AND MAINTAIN THE EQUIPMENT SHOULD BE TRAINED IN ITS PROPER USE, WARNED OF ITS DANGERS, AND SHOULD READ ENTIRE MANUAL BEFORE ATTEMPTING TO SET UP, OPERATE, ADJUST OR SERVICE THE EQUIPMENT. KEEP THIS MANUAL FOR FUTURE REFERENCE.

DURACLASS

GENERAL OFFICES: TISHOMINGO, MS

PHONE: CABLE ADDRESS:

TED 72050-1182

IMPORTANT SAFETY NOTICE

Proper service and repair are important to the safe, reliable operation of DuraClass products. Service procedures recommended by DuraClass are described in this service manual and are effective for performing service operations. Some of these service operations may require the useof tools or blocking devices specially designed for the purpose. Special tools should be used when and as recommended. It is important to note that some warnings against the use of specific methods that can damage the product or render it unsafe are stated in the service manual. It is also important to understand these warnings are not exhaustive. DuraClas could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, DuraClass has not undertaken any such broad evaluations. Accordingly, anyone who uses service procedures or tools which are not recommended by DuraClass must first satisfy himself thoroughly that neither his safety nor the product safety will be jeopardized by the method he selects.

WARRANTY

DuraClass warrants this unit to be free form defects in material and workmanship, under normal use and service, for a period of ninety (90) days, said period to run from the date when first placed into operation.

This warranty is expressly limited to the replacement or repair at its factory in Tishomingo, MS. or such other place as DuraClass may designate, of such parts of such products as shall be returned to it with transportation charges prepaid and which shall appear to its satisfaction, upon inspection at such factory or other place designated by it, to have been defective in material or workmanship.

This warranty does not apply to any unit of DuraClass equipment which shall have been repaired or altered outside of DuraClass so as to affect its stability or which has been subject to misuse, negligence or accident or which shall have been installed or operated other than in accordance with the printed instructions of DuraClass.

This warranty does not obligate DuraClass to bear the cost of labor in replacing defective parts. No other obligation is assumed or authorized to be assumed with respect to productsof DuraClass other than herein set forth.

DURACLASS DOES NOT ASSUME ANY LIABILITY FOR SECONDARY CHARGES, EXPENSES FOR ERECTING OR DISCONNECTING, OR ANY OTHER CONSEQUENTIAL LOSSES OR DAMAGES.

"WE MAKE NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MAKE NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE."



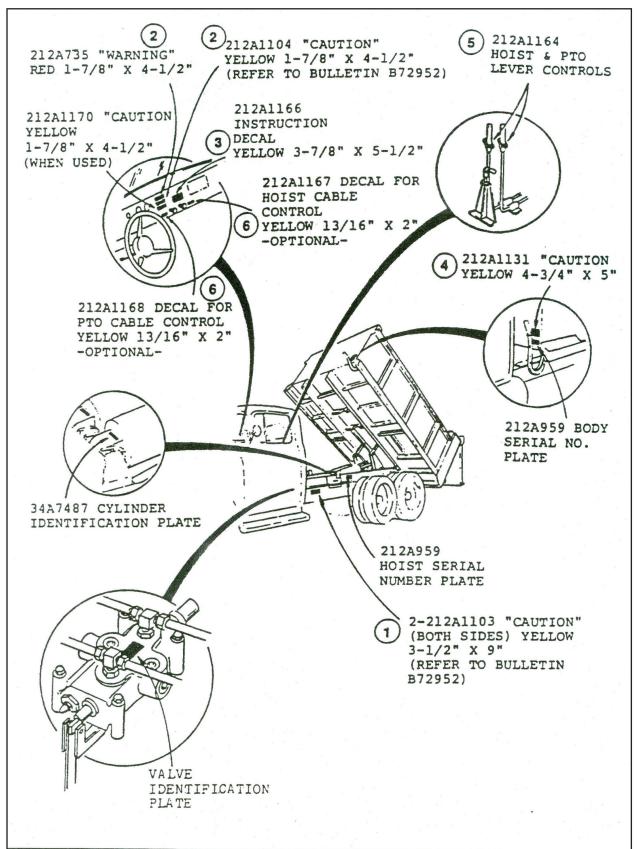
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DECAL PLACEMENT





ARM HOIST & BODY INSTALLATION DECAL PLACEMENT & SERIAL NUMBER PLATES LOCATION

BEFORE PLACING THE DUMP UNIT INTO OPERATION, THESE DECALS MUST BE PLACED IN THEIR PROPER POSITION.

- 1 CAUTION DECAL #212A1103 IS 3-1/2" X 9". IT MUST BE PLACED ON CHASSIS FRAME AS SHOWN ONE ON EACH SIDE.
- $3\frac{\text{INSTRUCTION DECAL } \#212\text{A}1166}{\text{MUST BE PLACED ON DASH NEXT TO THE } CAUTION AND }{\text{WARNING}}$ DECALS AS SHOWN IN THE SKETCH.
- 4 CAUTION DECAL #212A1131 IS 4-3/4" X 5". IT MUST BE PLACED ON THE DUMP BODY ABOVE THE SERIAL NUMBER PLATE AS SHOWN IN THE SKETCH.
- 5 IF THE INSTALLATION HAS LEVER CONTROLS USE DECALS #212A1164. SELECT THE DECAL THAT CORRESPONDS TO THE DIRECTION OF TRAVEL FOR PTO LEVER <u>IN AND OUT AND FOR HOIST CONTROL UP AND DOWN.</u>
- IF THE INSTALLATION HAS CABLE CONTROLS, YOU WILL USE #212A1167 DECAL FOR HOIST CONTROL AND #212A1168 DECAL FOR PTO CONTROL. BASED ON THE CONTROLS INSTALLATION FOR THIS SPECIFIC HOIST, YOU WILL HAVE TO SELECT AND INSTALL THE PTO DECAL (212A1168-1 or 212A1168-2) THAT CORRESPONDS TO THE DIRECTION OF TRAVEL OF THE CABLE CONTROLS FOR THE PTO IN AND OUT.

SECTION 1 — GENERAL INFORMATION

1.1 INTRODUCTION

This instruction manual contains installation, operation, maintenance, and parts list information for DuraClass Model 1715 PL and Model 1721 PL conversion hoists.

1.2 GENERAL INFORMATION

These are twin arm type hoists and are designed for use with wood or steel platform bodies.

The 1715PL hoist is used with bodies from 10' (3.048 m) to 15' (4.572 m) long, and the 1721 PL hoist is used with bodies 11' (3.353 m) to 17' (5.182 m) long. These are for single axle chassis installations and the dumping angle is 45°.

1.3 HOIST CAPACITY

Lifting capacity depends on the body length and the overhang beyond the rear hinge. The capacities for each model hoist and the recommended body lengths are charted in Figure 1.

SECTION 1 - GENERAL INFORMATION



HOIST LIFTING CAPACITY

CHASSIS CAB TO AXLE		BODY LENGTH		CAPACITY - BODY & PAYLOAD 1715PL 1721PL			I
IN.	MM	FT.	М	TONS-U.S.	TONS- METRIC	TONS-U.S.	TONS- METRIC
60	1524	10.0	3.048	16.0	14.5		
72	1829	11.0	3.353	13.0	11.8	16.0	14.5
		12.0	3.658	16.0	14.5	19.0	17.2
84	2134	12.0	3.658	11.0	10.0	13.5	12.2
		12.5	3.810	12.0	10.9	14.5	13.2
		13.0	3.962	13.0	11.8	15.5	14.1
		13.5	4.115	14.0	12.7	17.0	15.4
102	2591	13.0	3.962	8.5	7.7	10.5	9.5
		13.5	4.115	9.0	8.2	11.0	10.0
		14.0	4.267	9.5	8.6	11.5	10.4
		14.5	4.420	10.5	9.5	12.5	11.3
		15.0	4.572	11.0	10.0	13.5	12.2
120	3048	15.0	4.572			9.5	8.6
		15.5	4.724			10.0	9.1
		16.0	4.877			10.5	9.5
		17.0	5.182			11.5	10.4

Above capacities are based on mounting body with 3" (76 mm) clearance between front of body and back of cab, and hinge location 32" (813 mm) behind centerline of rear axle for 1715PL hoist and 33-1/8" (841 mm) for 1721PL hoist. Also assumes level loading, with center of gravity at midpoint of body.

FIGURE 1 - HOIST LIFTING CAPACITY
FOR MODEL 1715PL AND
MODEL 1721PL
CONVERSION HOISTS



SECTION 2 — INSTALLATION INSTRUCTIONS

Refer to mounting drawing 701D3499 for the 1715PL hoist and 701D3501 for the 1721PL hoist and perform the following.



REVIEW MANUAL BEFORE STARTING INSTALLATION.
STUDY THE JOB CAREFULLY TO DETERMINE ALL OF THE
HAZARDS PRESENT AND SEE THAT ALL NECESSARY
SAFEGUARDS OR SAFETY DEVICES ARE PROVIDED TO
PROTECT ALL PERSONNEL AND EQUIPMENT INVOLVED.

1.1 HOIST AND SPACER PADS

Remove body from chassis. Cut off end of chassis rails as shown and locate hoist frame square on chassis and with hinge apron tight against end of chassis. Cut off front en dof hoist frame, if necesary, to hold 3" (76.20 mm) clearance between frame and back of cab.

Locate spacer pads as shown; drill holes in pads to clear rivets, and weld pads to hoist frame. Locate hold downs and drill holes in chassis for snug fit of bolts.

2.2 POWER TAKE-OFF, PUMP AND DRIVE LINE

Select the correct power take-off to match truck transmission. The PTO output shaft should run at 45 to 65 percent of engine speed. Mount PTO according to manufacturer's recommendation.

Bolt pump to hoist frame as shown and install drive shaft from PTO to pump. The centerline to centerline of front and rear 80" (2032 mm). Cut drive shafts to the proper length to have maximum engagement in universal joints. Hand grease end of drive shaft and slip joint before installing. Maximum angle on drive line shafts not to exceed 10°. See Figure 2 for installation recommendations.

2.3 CONTROLS

Lever controls are standard and should be mounted on the floor of the cab convenient to operator.

See control installation drawing.

2.4 PIPING AND FILLING SYSTEM

Connect piping from pump to cylinder as shown. Use a thread sealing compound on all pipe threads.

Remove piping from pump to cylinder as shown. Use a thread sealing compound on all pipe threads.

Remove vent plug at top of cylinder and fill with oil (See Section 4.5 for proper oil). Replace plug.

SECTION 2 — INSTALLATION INSTRUCTIONS



2.5 REMOUNT BODY AND BODY GUIDES

Install Z longmembers. Cut off front of longmember, if necessary, to hold 3" (76.20 mm) clearance between longmember and back of cab. Mount longmembers to outside (as shown), if possible. If longmember are mounted to inside, hinges must be shimmed so that side movement of long members is restricted to 1/8" (3.04 mm). Install grease fittings in hinges.

Install crosshead shaft through pick up plates of longmembers and upper end of links. Bolt in place.

Remount body so that it is square on the chassis, has the proper cab clearance and fits snugly into Z longmembers. If wood longmembers on body, bolt to Z longmembers with 1/2" (12.70 mm) carriage bolts (not furnished). If steel longmembers, bolt to Z longmembers with 1/2" (12.70 mm) capscrews (not furnished), or weld body longmember to Z longmembers.

Locate body guides at a convenient location close to cylinder trunnion. Drill (4) 41/64" (16.25 mm) holes in chassis rail, using holes in body guide as a template. Bolt in place.

2.6 VENTING OF SYSTEM



WHEN ANY WORK IS TO BE DONE ON BODY OR HOIST AND BODY IS FULLY OR PARTLY RAISED, IT MUST BE BLOCKED SECURELY SO IT CANNOT FALL. IN ADDITION, DISENGAGE THE PTO AT SUCH TIME.

READ AND STUDY OPERATION SECTION OF ANUAL BEFORE PROCEEDING.

Raise body slowly until cylinder is fully extended and block body securely. Remove vent plug from top of cylinder and refill cylinder if necessary. Raise and lower the body several times until air is eliminated from the system. Recheck oil, observing Warning precautions. With body raised the oil level should be 2" (50.80 mm) to 3" (76.20 mm) below the fill hole in the cylinder. Add oil, if necessary. Replace vent plug.

Keep dirt out of system.

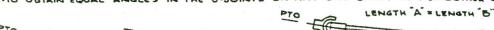
2.7 <u>DECALS</u>

Place <u>WARNING</u> and <u>CAUTION</u> decals on instrument panel in plain view of operator and on body and hoist. See goldenrod sheet B72952-1275 for placement.



DURACLASS SECTION 2 — INSTALLATION INSTRUCTIONS





PTO SHAFT AND PUMP SHAFT PARALLEL

TWO-JOINT DRIVE



PTO SHAFT AT ENGINE ANGLE PUMP SHAFT HORIZONTAL

PUMP

TWO-JOINT DRIVE

FOR THIS TWO JOINT DRIVE LINE

USE EITHER OF THE CONDITIONS

SHOWN IN FIGS. 1 & 2 ABOVE

THIS SHAFT TO BE IN LINE OF PTO SHAFT WITHIN I'' IN TOP AND SIDE VIEW NOTE -BOTH YOKES ON ANY ONE SHAFT TO BE IN THE SAME PLANE

THREE-JOINT DRIVE

FIGURE 2 - DRIVE LINE RECOMMENDATIONS

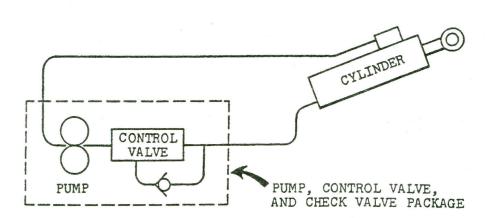


FIGURE 3 - SCHEMATIC OF HYDRAULIC CIRCUIT

SECTION 2 — INSTALLATION INSTRUCTIONS



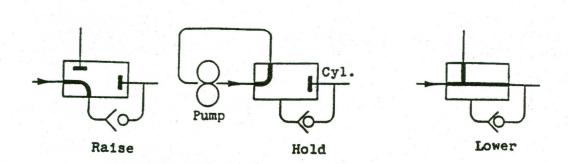


FIGURE 4 - SCHEMATIC OF VALVE POSITIONS

WARNING

DO NOT OPERATE OR SERVICE THIS MACHINE UNTIL YOU HAVE READ AND UNDERSTAND THE OPERATION AND MAINTENANCE MANUAL SUPPLIED WITH THIS EQUIPMENT. MANUALS CAN ALSO BE OBTAINED FROM A DURACLASS DISTRIBUTOR.

212A735 DURACLASS, TISHOMINGO,MS.

FIGURE 5 - WARNING DECAL

DURACLASS'

SECTION 3 — OPERATION

3.1 GENERAL

Before operating this hoist, see capacity chart (Figure 1) and read warningand caution decals on instrument panel, body, and hoist. See goldenrod sheet B72952-1275 for decals and placement.

CAUTION

WHEN OPERATING DO NOT STAND IN, MOVE THROUGH, OR ALLOW ANYONE ELSE TO STAND IN OR MOVE THROUGH THE AREA THAT YOUR HOIST OPERATES AND PASSES THROUGH, ORINTO AN AREA THAT AN UPSET LOAD MIGHT FALL.

3.2 <u>DEFINITION OF AN OPERATOR</u>

An operator as referred to herein is a competent person who has read and understand the "Operation and Maintenance Manual".

3.3 POWER TAKE-OFF OPERATION

1) Mechanical Transmission

- —To encourage PTO, place transmission shift lever in NEUTRAL.
- -Set hand brake.
- —Depress clutch pedal.
- —Shift PTO into gear.
- —Release clutch pedal.

Equipment is now ready to operate.

2) <u>Allison Transmission</u>

- —To engage PTO, stop the truck and set the hand brake.
- —With the Allison transmission in any gear position, engage PTO.

NOTE: If gears do not mesh, it may be necessary to let the truck creep slightly in in gear while putting a slight pull on the PTO control.

- —After PTO is engaged, move transmission shift lever to NEUTRAL. Equipment is now ready to operate.
- —To disengage PTO, move transmission shift lever into any gear position and shift PTO out of gear.
- —Move transmission shift lever to NEUTRAL.

Truck is now ready to move.

SECTION 3 — OPERATION



CAUTION

DISENGAGE PTO WHEN HOIST IS NOT IN USE OR WHEN TRAVELING ON THE HIGHWAY. DO NOT MOVE TRUCK (LOADED OR UNLOADED) UNLESS THE BODY IS LOWERED AND RESTING ON TRUCK FRAME.

3.4 HOIST OPERATING INSTRUCTIONS

(For schematic of valve positions, see Figure 4.)

To Raise Body — With PTO engaged (See Section 3.3) and truck engine running at a speed slightly faster than idle, move valve control in cab to RAISE position (rearward).

To Hold Body — To hold in any position, move valve control in cab to HOLD position. If body will be held in position any length of time, shift PTO out of gear.

To Lower Body — Disengage PTO (See Section 3.3) and move valve control in cab to LOWER position (forward).

CAUTION

WHEN TRAVELING ON THE HIGHWAY, THE VALVE CONTROL LEVER MUST BE KEPT IN THE HOLD POSITION AT ALL TIMES, AND THE PTO MUST BE DISENGAGED.

3.5 VEHICLE STORAGE



IN ALL CASES, WHEN TRUCK IS STORED OR NOT IN USE, THE BODY MUST BE IN THE FULL LOWERED POSITION AND RESTING ON THE TRUCK CHASSIS OR HOIST FRAME. KEY SHOULD BE REMOVED FROM IGNITION TO PREVENT TAMPERING BY UNAUTHORIZED PERSONNEL.

DURACLASS

SECTION 4 —MAINTENANCE

4.1 GENERAL

Maintenance personnel responsible for the upkeep of this equipment should possess a basic understanding of the equipment and normal sequence of operation. Refer to Sections 1 and 3 of this manual.

Maintenance discussed in this section is divided into two parts — Preventive Maintenance and Corrective Maintenance (Trouble Shooting).

Preventive Maintenance consists of those routines which keep the equipment in proper working condition. Preventive Maintenance is not only desirable, but is necessary, since routine inspection will ensure continued trouble-free operation of the equipment and prevent, or at least detect at an early stage, mechanical or hydraulic troubles that might otherwise develop into equipment malfunction.

Corrective Maintenance (Trouble Shooting) is the examination and repair or replacement of the part or parts of the equipment that resulted in equipment malfunction.

4.2 SAFETY PRECAUTIONS



WHEN ANY REPAIRS OR ADJUSTMENTS ARE MADE AND BODY IS FULLY OR PARTLY RAISED, BODY MUST BE BLOCKED SECURELY SO IT CANNOT FALL.

4.3 SUGGESTED PREVENTIVE MAINTENANCE PROGRAM

Suggested preventive maintenance checks are listed below.

Perform These Checks Monthly

- 1) Check bolt tightness at shear bolt at rear, hinge pins, both ends of lever arm shaft, upper and lower link pins, cylinder upper and lower pins, hold downs, PTO, pump, cab control and drive line bearing. Self locking nuts are used throughout unit, and any time a replacement is needed, it must be replaced with an equal part.
- 2) Inspect drive line for possible wear and check set screws for tightness and lock wire in position.
- 3) Check oil level in cylinder for correct height. See Section 2.9.
- 4) Check color of oil for possible contamination. If oil appears thick or dirty, drain system and replace. See Section 4.5 for proper type oil.
- 5) Check for oil leaks in all hydraulic fittings and hoses. Retighten fittings and replace hoses as necessary.

SECTION 4 —MAINTENANCE



4.4 LUBRICATION

The hoist should be lubricated at least once a week. Use same grease as recommended for chassis. Lubrication points are as follows:

- 7) Drive line bearing......1 fitting

Use oil on control rail ends, cable, cable lines, and link ends. Hand grease spline and sleeve.

4.5 HYDRAULIC OIL

When adding or replacing oil, use a hydraulic oil that contains antifoamant, rust and oxidation inhibitors, and an antiwear additive. If a hydraulic oil is not available, use an API engine oil, designation SE, with an SAE viscosity rating of 10W30.

DO NOT use low viscosity naphtha base motor oil, hydraulic brake fluid, or aircraft hydraulic fluid.

We recommend that the oil in the system be changed at least twice a year.

4.6 CORRECTIVE MAINTENANCE (TROUBLE SHOOTING)

The operation of any mechanical or hydraulic system depends on the life span of the various parts. Some parts should last indefinitely; others may not. This section is a general guide to the causes of possible equipment malfunction.

<u>Safety</u>

Respect the potential danger of the equipment. Refer to Section 4.2 "Safety Precautions" before starting any repair.

Test Equipment

Use high quality test equipment. Any gage range should be well beyond the expected test value.

Trouble Chart

To aid maintenance personnel in locating and correcting a problem, a trouble chart has been included.

SECTION 4 —MAINTENANCE

TROUBLE CHART					
Trouble	Cause	Remedy			
Failure to raise load.	1 A) Insufficient oil in system.	1 A) Add oil to cylinder to proper level.			
	1 B) Air in system.	1 B) Vent air from system.			
	1C) Pinched hydraulic hose.	1 C) Locate and relieve pinching. Relocate or replace hoses as required.			
	1 D) Control linkage parts worn or missing.	D) Check linkage for proper connections. Replace worn or missing parts			
	1 E) Pump not running.	1 E) Check U-Joints at PTO and pump for tightness.			
	1 F) Control valve not operating.	1 F) Check valve for full throw.			
	1 G) Defective pump.	1 G) (See below)			
in Section of cylinder and conne 300 rpm ar onds at a t	temporarily plug this hole in cylect to a 0-3000 psi (20 682 kPa) produced read gage. <u>DO NOT</u> run pump	nade. Disconnect hose from base end inder so that all the oil is not lost.) pressure gage. Run pump at about this way for more than a few sec st 1000 psi (6 894 kPa) pressure. If			
2) Oil foaming	2A) Insufficient oil in system.	2A) With body raised the oil level should be 2" (50.80 mm) to 3" (76.20 mm) below the cylinder fill hole.			
	2B) Suction line hose fittings loosse, allowing air to enter system.	2B) Tighten hoses and fittings; vent air from system.			

SECTION 4 —MAINTENANCE



2) (Cont.)	2C) Oil too heavy.	2C) Install proper oil for expected temperature.
	2D) Pump operated at high speed in cold weather.	2D) Operate pump at slower speed.
3) Body raises unsteadily, jerks or vibrates.	3A) Air in system.	3A) Check suction hoses and fittings for leaks; retighten loose fittings and vent cylinders.
4) Body will not stay up.	4A) Control valve not shift ing completely, valve spool or housing scored. Check valve not seating properly. Cylinder or piston rings scored, causing internal leakage.	4A) Adjust linkage for com plete shifting; replace or repair valve section of pump. Replace piston rings. Reseat check valve. Return cylinder to DuraCell distributor for repair or replacement.

SECTION 5—REPAIRS



WHEN ANY REPAIRS OR ADJUSTMENTS ARE MADE AND BODY IS FULLY OR PARTLY RAISED, BODY MUST BE BLOCKED SECURELY SO IT CANNOT FALL. IN ADDITION, DISENGAGE PTO AT SUCH TIME.

5.1 CYLINDER

For any major repair the cylinder should be returned to the DuraClass distributor.

Repairs in the field should be limited to the replacement of rod packing and piston rings. To replace packing raise body, observing WARNING rules above, unscrew packing nut, remove present packing and install new packing set. Dip packing in oil before installing.

To replace piston rings remove cylinder from chassis. Loosen packing nut unscrew cylinder head and remove this assembly from cylinder. Replace piston rings and replace assembly. Use a new rubber packing ring around cylinder head when reinstalling.

Keep dirt out of system.

5.2 **PUMP**

Pump (with integral control valve) should be returned to the DuraClass distributor for any repairs beyond the replacement of seals and O-rings.

PARTS INFORMATION

TO THE OWNER

If you should need information not given in this manual or require the service of a trained mechanic, we urge you to use the extensive facilities offered by the authorized DuraClass Distributor in your locality.

INSTRUCTIONS FOR ORDERING REPLACEMENT PARTS

For ease in ordering of DuraClass parts, a system of part and assembly numbers is used. It's important these numbers be used wherever and whenever possible.

All parts listed on the drawings, repair parts sheets or exploded views show parts in their proper relationship. Each individual part is identified by name and part number.

Use the following suggestions and you should have little difficulty in getting quick and efficient parts delivery.

IMPORTANT

- 1) Give Model, Serial, and Identification numbers found on Identification Plate of the unit. Be sure numbers are complete and include the prefix and suffix, if any.
- 2) Order by Part Number only Not by Item Number.
- 3) Check every part number for accuracy. The part numbers, sometimes are very similar and can be easily transposed.
- 4) Be careful to order correct quantity.
- 5) When ordering an assembly, make sure all the parts you need are included in the assembly.
- 6) Common hardware is not listed.
- 7) Say whether shipment is to be made Express, Parcel Post or Freight. Give Freight shipping point if different from mailing point.
- 8) ORDER PARTS FROM YOUR NEAREST DURACLASS DISTRIBUTOR.

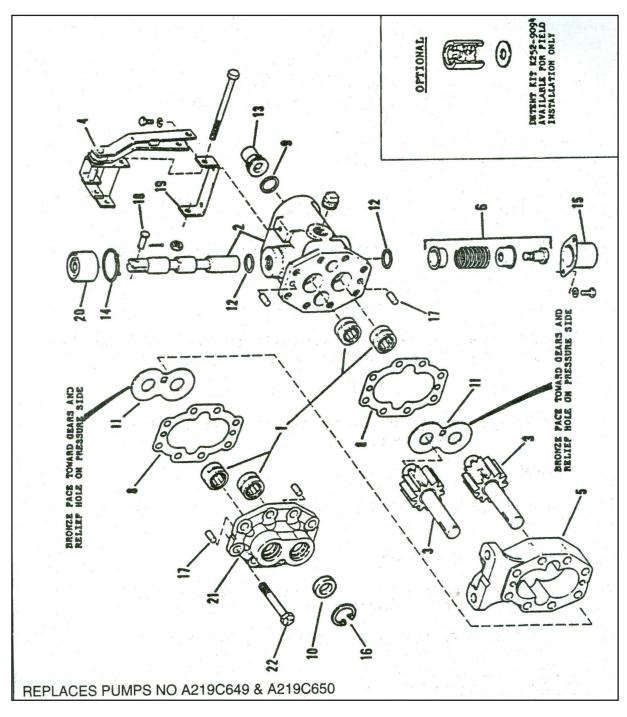


DURACLASS

TRUCK EQUIPMENT DIVISION

REPLACEMENT PARTS LIST

HYDRAULIC PUMP-VALVE ASSEMBLY



A219C1411 & A219C1412 GEAR PUMPS WITH ROLLER BEARINGS



GEAR PUMPS WITH ROLLER BEARINGS

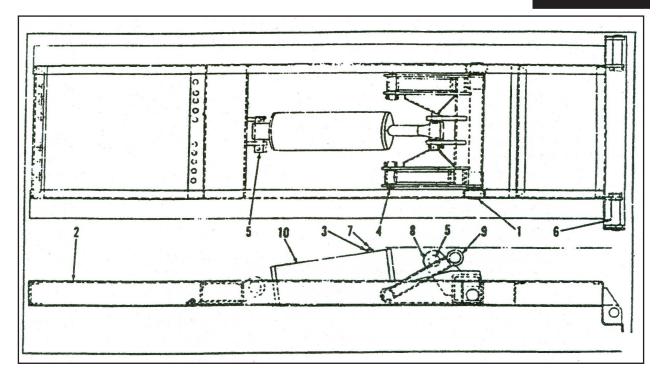
PUMP AND VALVE ASSEMBLY NO.		A219C1411	A219C412
GEAR SIZE		2"	3"
ITEM NO.	DESCRIPTION OF PART	DURACLASS PART NO.	DURACLASS PART NO.
1	BEARING	3A3243	3A3243
2*	HOUSING & SPOOL - VALVE (INCLUDES 1 EACH OF ITEMS 9 & 13 & 2 OF ITEM 12)	A6B3009	A6B3009
3	GEAR ASSEMBLY	A7Al267	A7Al268
4	CONTROL LEVER ASSEMBLY	A13B4811	A13B4811
5	SPACER	15C1670	15C1671
6	SPRING CENTERING KIT	K252-9684	K252-9684
7			
8	GASKET	22B1165	22B1165
9	GASKET	22A1649	22A1649
10	PACKING RING (2 REQD.)	22A3208	22A3208
11	PLATE — WEAR	134A3020	134A3020
12	RING — "O"	26A3239	26A3239
13	VALVE — CHECK	A31A383	A31A383
14	CLAMP — HOSE	36Al248	36Al248
15	CAP — DUST	42A907	42A907
16	RETAINING RING	26B2919-28	26B2919-28
17	DOWEL	48A1853	48A1853
18	PIN — CLEVIS	48A3127-4	48A3127-4
19	BRACKET — SUPPORT	111A8826	111A8826
20	воот	112A1778	112A1778
21	COVER	112B4562	112B4562
22	HEX BOLT, SAE GRADE 5, 1/2" - UNC	3-1/2" LG.	4 - 1/2" LG.

DETENT KIT K252-9094 (OPTIONAL) AVAILABLE FOR FIELD INSTALLATION ONLY.

*A6B3009 Housing & Spool Assembly (Item 2) is a matched set and is only sold as such due to close tolerances. Items 9, 12, & 13 may be purchased separately.



A239C442 **HOIST FRAME**



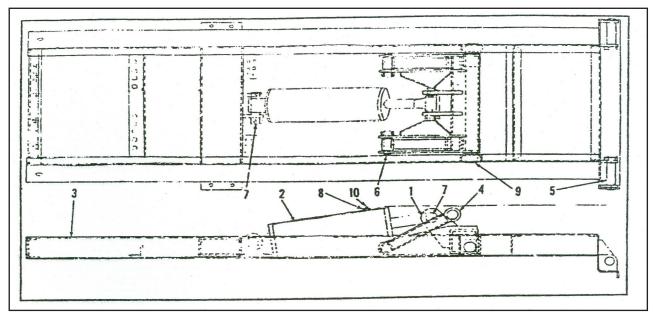
FOR DURACLASS MODEL 1715PL CONVERSION HOIST

ITEM NO.	DURACLASS PART NO.	DESCRIPTION OF PART	NO REQD.
1	8A5695	Shaft — Lever Arm	1
2	A37D7167	Frame — Hoist	1
3	46A168	Plug — Vent	1
4	48Al254	Pin — Link Arm	2
5	48A1608	Pin — Wrist and Trunnion	2
6	48A3559	Pin — Hinge	2
7	60A181	Valve — Pop Off	1
8	A93C1764	Arm	1
9	A4B1558	Link	2
10	Al C3906	Cylinder Assembly	1

ORDER BY PART NUMBER, NOT BY ITEM NUMBER



HYDRAULIC HOIST **ASSEMBLY**



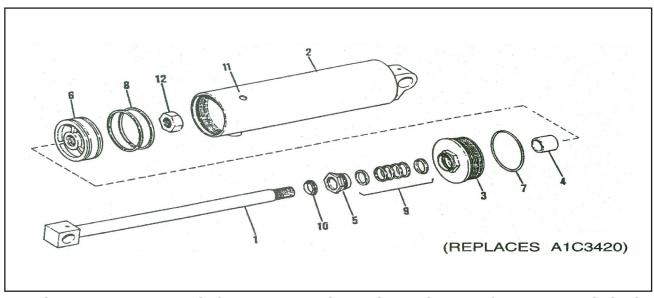
FOR DURACLASS MODEL 1721-PL CONVERSION HOIST

HOIST ASSEMBLY NOA239C479				
FOR HOIST MODEL1721-PL				
ITEM NO.	DESCRIPTION OF PART	DuraClass PART NO.		
1	Arm Assembly	A93C1765		
2	Cylinder Assembly	AI C3907		
3	Frame — Hoist	A37D7736		
4	Link (2 Reqd.)	A4B1559		
5	Pin — Hinge (2 Reqd.)	48A3641		
6	Pin — Link (2 Reqd.)	48A1615		
7	Pin — Trunnion (2 Reqd.)	48A1610		
8	Plug — Vent	46A186		
9	Shaft — Arm Pivot	8A5695		
10	Valve — Pop Off	60A181		

ORDER BY PART NUMBER, NOT BY ITEM NUMBER



A1C3906 **HYDRAULIC CYLINDER**



A1C3906 HYDRAULIC CYLINDER FOR MODELS 1715 & 1715PL HOISTS

ITEM NO.	DURACLASS PART NO.	DESCRIPTION OF PART	NO REQD.
1	A27C3787	Piston Rod Assembly	1
2	A85B34	Barrell Assembly	1 1
3	10C4188	Head	1 1
4	15A2405	Spacer	1 1
5	23B527	Nut — Packing	1 1
6	246636	Piston	1 1
7	26B941	Ring — "O"	1
8	26Al269	Ring — Piston	2
9	26A3622	Packing	1 1
10	26B3707-6	Ring — Wiper	1
11*	60A181	Valve — Pop Off	1 1
12	FS302600	Jam Nut, 1-3/4 — 12NF	1

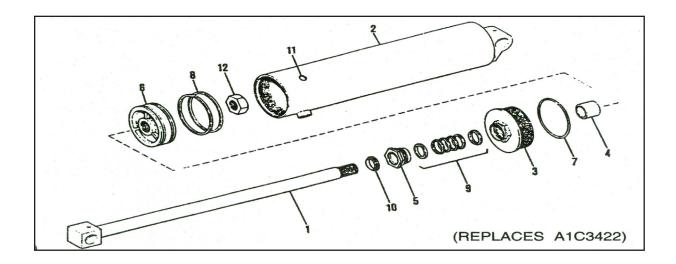
*NOT ILLUSTRATED — NOT A PART OF COMPLETE ASSEMBLY — ORDER SEPARATE

ORDER BY PART NUMBER — NOT BY ITEM NUMBER

34 —3/8" (872 mm) — CENTER TO CENTER, CLOSED 49 — 7/8" (1266 mm) — CENTER TO CENTER, FULLY EXTENDED 7.1" (180mm) — BORE (BARRELL)



A1C3907 **HYDRAULIC CYLINDER**



A1C3907 HYDRAULIC CYLINDER FOR MODELS 1721 & 1721PL HOIST

ITEM NO.	DURACLASS PART NO.	DESCRIPTION OF PART	NO. REQD.
1	A27C3789	Piston Rod Assembly	1
•		· · · · · · · · · · · · · · · · · · ·	. !
2	A85B35	Barrell Assembly	1
3	10C4188	Head	1
4	15A2406	Spacer	1
5	23B527	Nut — Packing	1
6	24B636	Piston	1
7	26B941	Ring — "O"	1
8	26Al269	Ring — Piston	2
9	26A3622	Packing	1
10	26B3707-6	Ring — Wiper	1 1
11*	60A181	Valve — Pop Off	1 1
12	FS302600	Jam Nut, 1-3/4 — 12NF	1

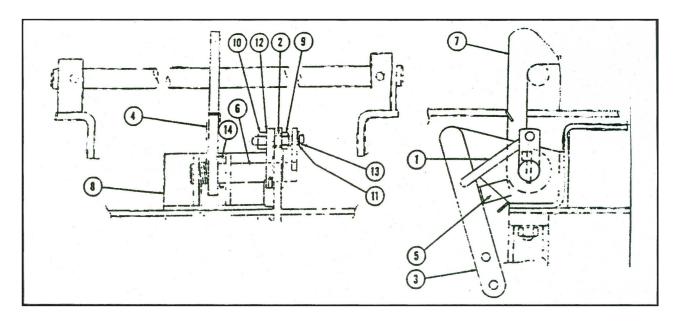
*NOT ILLUSTRATED — NOT A PART OF COMPLETE ASSEMBLY — ORDER SEPARATE

ORDER BY PART NUMBER — NOT BY ITEM NUMBER

43.5" (1104 mm) — CENTER TO CENTER, CLOSED 65" (1651 mm) — CENTER TO CENTER, FULLY EXTENDED 7.1" (180mm) — BORE (BARRELL)



A53C455 **BODY LOCKING** DEVICE



FOR 1715PL AND 1721PL CONVERSION HOISTS

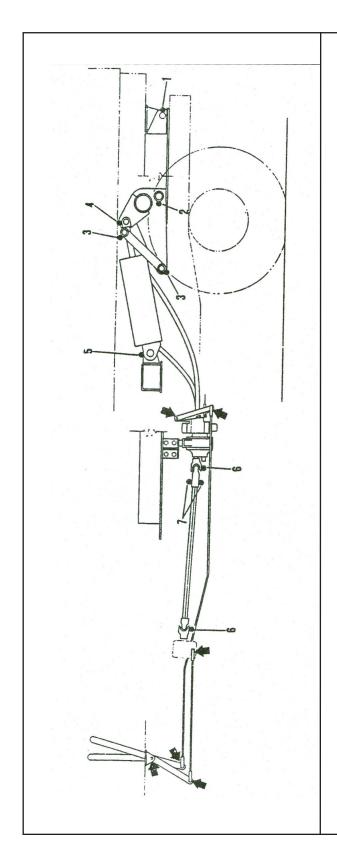
ITEM	DURACLASS	DESCRIPTION OF PART	NO
NO.	PART NO.		REQD.
1	4A772	Link — Operating	1
2	9A950	Bushing	1
3	13A3095	Lever — Operating	1
4	19A712	Spring	1
5	21A2001	Stop — Operating Lever	1
6	A48A2023	Pin	1
7	A53A388	Hook	1
8	A77B1518	Support	1
9		Capscrew — Hex. Hd., 1/2"NF x 1-1/2"	1
10		Nut — Hex. 1/2"NF	1
11		Washer — Flat, 3/8"	2
12		Washer — Lock, 1/2"	1
13		Pin — Cotter, 1/8" x 3/4"	2
14		Pin — Taper, No. 6 x 1-3/4"	1

ORDER BY PART NUMBER, NOT BY ITEM NUMBER.



LUBRICATION CHART



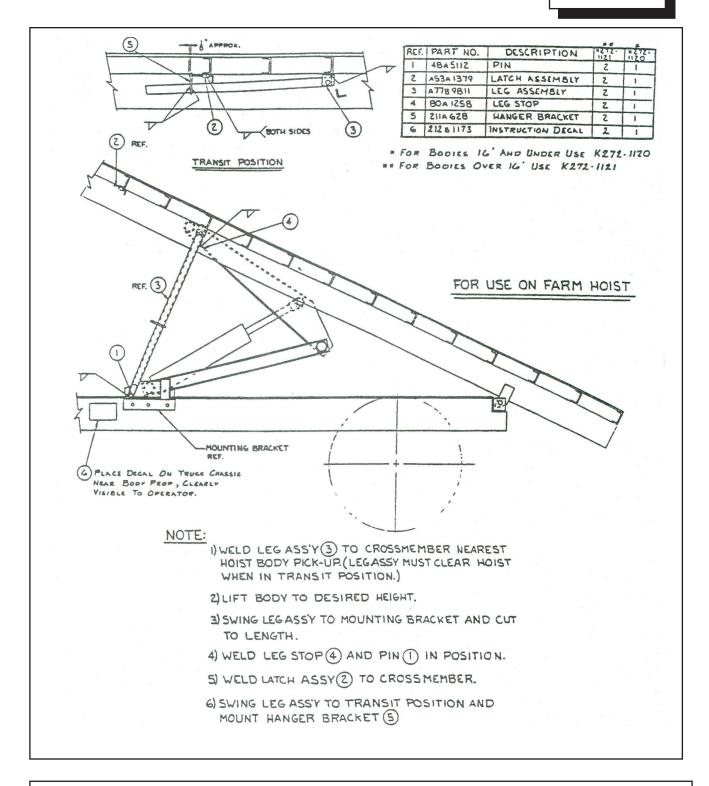


LUBRICATION CHART*

*Use grease recommended by chassis manufacturer.



BODY PROP INSTALLATION



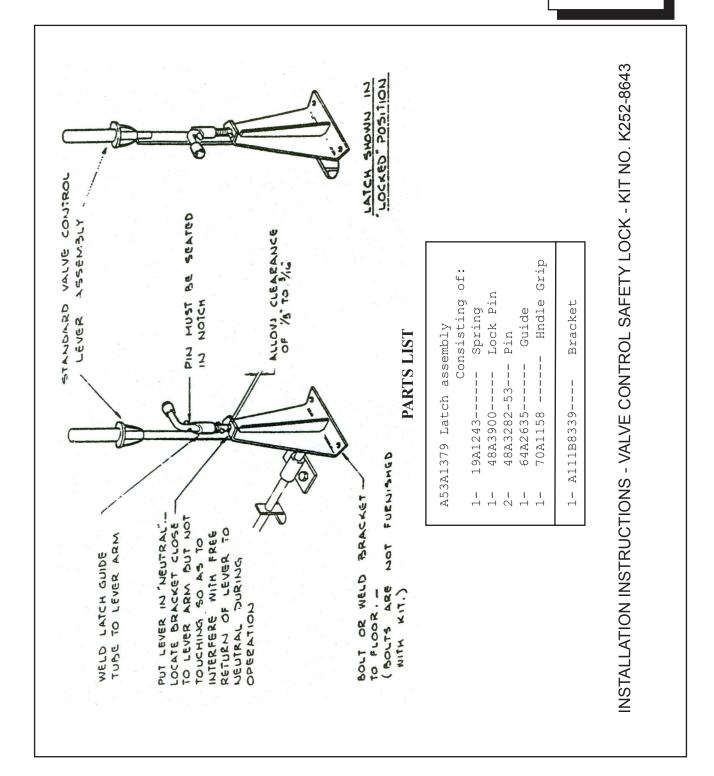


DURACLASS

TRUCK EQUIPMENT DIVISION

REPLACEMENT PARTS LIST

VALVE CONTROL SAFETY LOCK





DURACLASS

TRUCK EQUIPMENT DIVISION

REPLACEMENT PARTS LIST

BODY RAISED INDICATOR KIT

Position body raised switch as close to the cab as possible on the right chassis frame or hoist frame member. If mounting to the chassis frame, use the mounting bracket as a template and drill two holes for 3/8" screws. If attaching to the hoist frame, the bracket can be bolted or welded into place. See figure 6.

Locate indicator light under vehicle dashboard or at any other convenient location visible to the operator. Use the bracket as a template and drill two holes for #10 screws. See figure 7. Connect wiring as shown in figure 7. Test for proper operation.

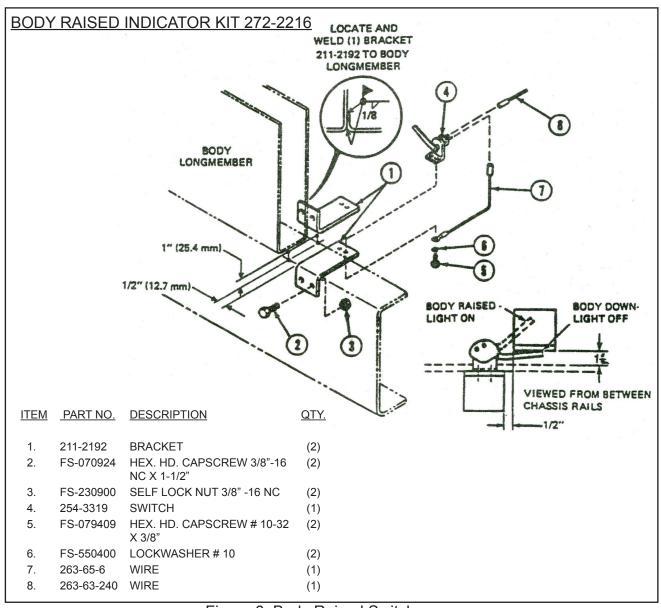


Figure 6. Body Raised Switch



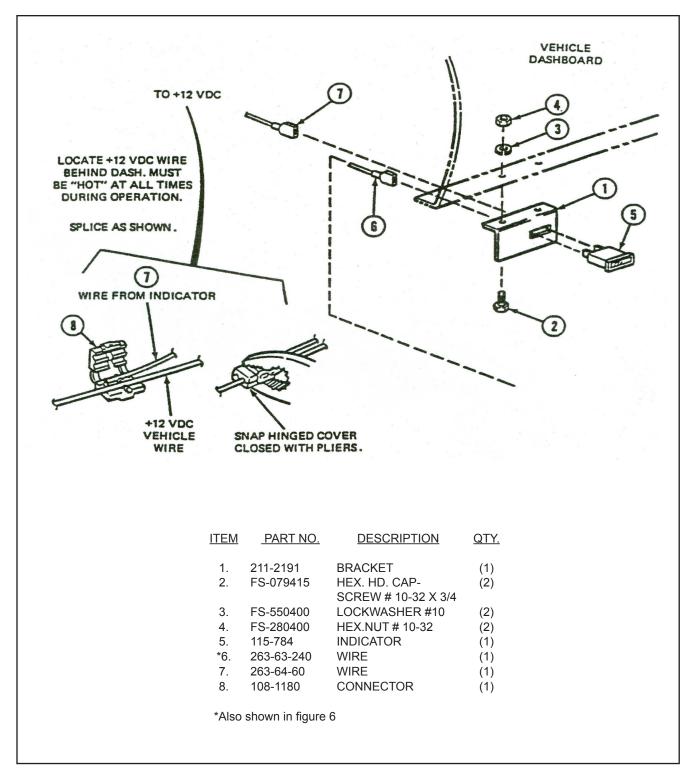


Figure 7. Body Raised Indicator



BACK-UP ALARM INSTALLATION

Mount back-up alarm as shown below using existing holes in bracket on rear hinge frame.

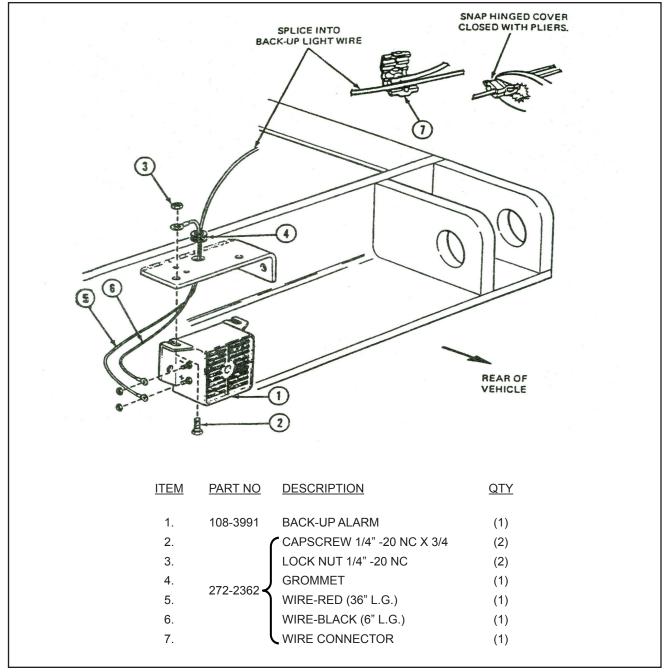
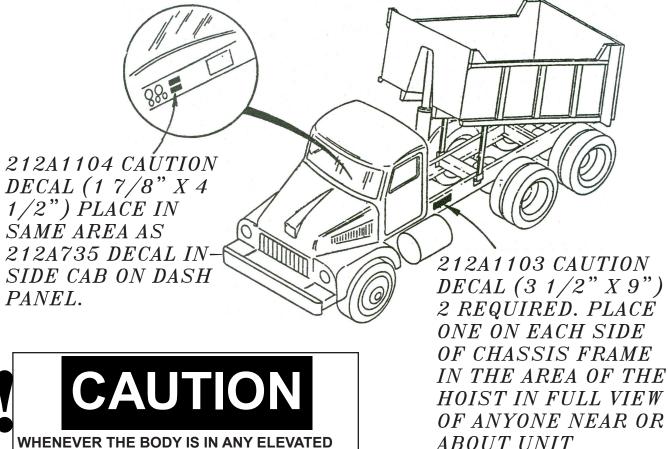


Figure 8. Back-Up Alarm



<u>IMPORTANT OPERATOR - MAINTENANCE INSTRUCTIONS</u> <u>FOR ALL DURACLASS FRONT MOUNT TELESCOPIC, ARM</u> TYPE AND CONVERSION HOISTS.



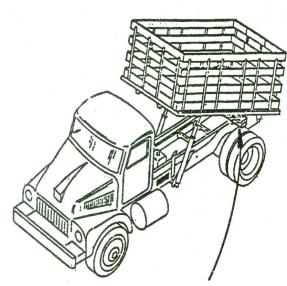
WHENEVER THE BODY IS IN ANY ELEVATED OR RAISED POSITION IT MUST BE SECURELY PROPPED OR BLOCKED SO IT CAN NOT FALL ON ANYONE.

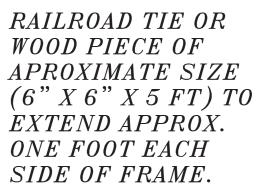
DURACLASS, TISHOMINGO, MS

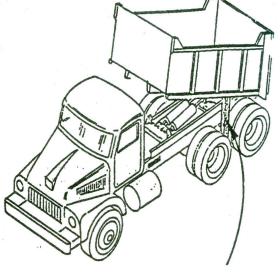
THESE DECALS MUST BE KEPT CLEAN SO THAT ANY PERSON IS MADE AWARE TO BLOCK OR PROP THE BODY TO
PREVENT IT FROM FALLING ON ANYONE. ABOVE SKETCH
SHOWS SUPPORT PROPS MANUFACTURED BY DURACLASS
AVAILABLE FOR PURCHASE THROUGH ANY AUTHORIZED
DURACLASS TRUCK EQUIPMENT DISTRIBUTOR. ALTERNATE
METHODS FOR BLOCKING ARE SHOWN IN FOLLOWING IL—
LUSTRATIONS:

SEE REVERSE SIDE FOR ALTERNATE BLOCKING METHODS.

872952-1275







PLACE TWO 4" X 4"'S
APPROX. 5 FT LG.
BETWEEN TANDEM
TIRES AND BLOCK
SECURELY AGAINST
BODY UNDERSTRUCTURE.

ALTERNATE BLOCKING METHODS

