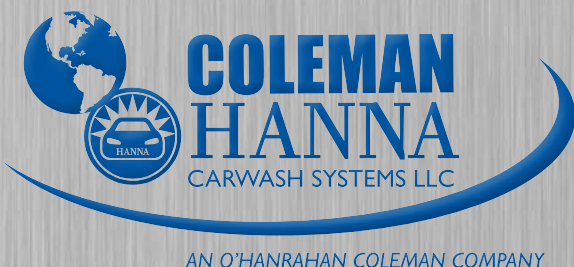




Correlators: C-3 & C-4

Service Manual



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Hanna Correlator C-3, C-4

Includes Instructions for Part Numbers
400085 and 400010

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DESIGN FEATURES

C-3 AND C-4 CORRELATORS

- . SOLID DIAMOND PLATE AND ANGLE CONSTRUCTION
- . CORROSION RESISTANT PAINT OR GALVANIZED COATINGS
- . SUPER-SMOOTH OPERATION
- . EASY INSTALLATION

HANNA'S C-3 and C-4 Correlators are designed to provide years and years of constant, maintenance-free use.

The correlator consists of a steel frame and bed track, a moveable bed, stabilizer springs, and cover plates.

The surface area of the correlator is constructed of 1/4" diamond plate to provide a non-slip grip. The spring-loaded moveable bed rides on 22 non-corrosive roller bearings, evenly distributing the vehicle weight over the entire bed.

The wide design provides for virtually any vehicle size and shape, while the low profile allows for minimum installation preparation.



OPERATIONAL FEATURES

Each correlator comes completely pre-assembled.

Field installation and assembly basically consists of placing the correlator in the desired location, aligning it with the conveyor, and tacking it into place. Final preparation requires the removal of the shipping bolt that prevents the bed from moving during shipment.

As the vehicle drives onto the correlator, the conveyor roller guides move the tires into place into the conveyor by shifting the correlator plate from side to side.



SAFETY

Notes, Warnings, and Cautions

Note: This symbol is used to clarify a procedure or to point out an operational item that may be significant during the assembly process.

Warning: This symbol is used to point out a procedure that if not followed could result in damage to the equipment being assembled. It is followed by the precautions necessary to prevent this damage.

Caution: This symbol is used to point out a procedure or process that may be hazardous to personnel who may be assembling the piece of equipment. It is then followed by an explanation of the hazard, and precautions necessary to prevent personal injury.



INSTALLATION

Tire and Wheel Applicator Assembly

Hanna Part Numbers 424357 and 424673

Caution: Shear cut and plasma cut steel or stainless steel pieces may have sharp edges. To prevent personal injury, it is recommended that protective gloves be worn when handling and assembling these pieces.

- a. Measure the size and depth of the pre-formed conveyor pit to insure that the correlator will fit into the pit, and that the top outer edges of the correlator overlap the concrete inset angle around the pit.

Note: The pit for the correlator should be pre-built by the contractor laying the cement for the car wash flooring. The pit dimensions for a C-3 or C-4 correlator should be as designed in the appropriate Hanna General Construction Drawing S4. The approximate pit surface dimensions for the C-3 correlator are 12' 1-1/2" by 3' 2" wide, with a minimum depth of 6" (145.5" x 38" x 6"). The approximate pit surface dimensions for the C-4 correlator are 12' 1-1/2" by 4' 2" wide, with a minimum depth of 6" (145.5" x 50" x 6").

Caution: The C-3 correlator weighs 910 pounds, while the C-4 correlator weighs 1,187 pounds. Do not stand or place your hands or feet in such a position that the correlator may shift and cause harm. Do not remove the shipping screw until the correlator is in position in the pit, as the movement of the bed may cause an unstable condition on the forklift.

- b. Using a forklift of the necessary size, gently angle the correlator into the pit, and slide the leading edge off the forks until it rests on the lip of the pit.
- c. Lay some pieces of 2" x 4" boards on edge under the trailing edge of the correlator so that the fork lift can be repositioned.
- d. Reposition the forklift so that the tips of the fork rest under the lip of the trailing edge of the correlator and lift this edge enough to remove the 2" x 4" boards.
- e. Lower and slide the correlator in position in the pit, and lower the trailing edge into place.
- f. When the forks are resting on the ground, slowly back out from under the lip of the correlator and let it settle into place.
- g. Using a pry bar or similar tool, align the correlator at a 90 degree angle to the conveyor.

Note: Most installers recommend that the edge of the correlator closest to the conveyor be tack welded to the piece of angle iron imbedded in the floor to prevent shifting and movement of the correlator in the pit.

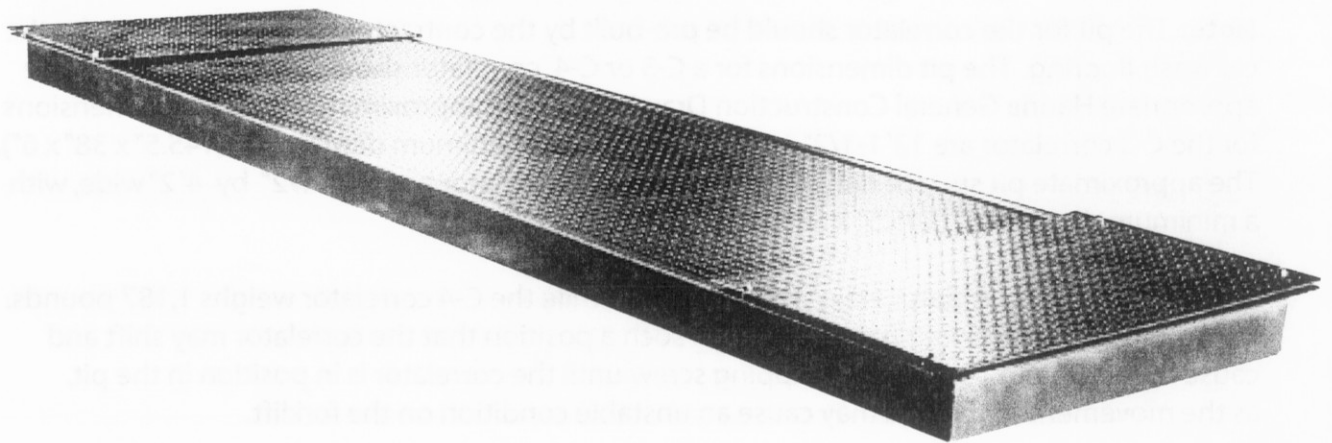
- h. Tack-weld the correlator at three or four spots into place over the angle.
- i. Clean the weld points and spray paint with a color matching paint.
- j. Remove the shipping bolt from the correlator, and move the bed from side to side to insure freedom of movement.



PACKING LIST

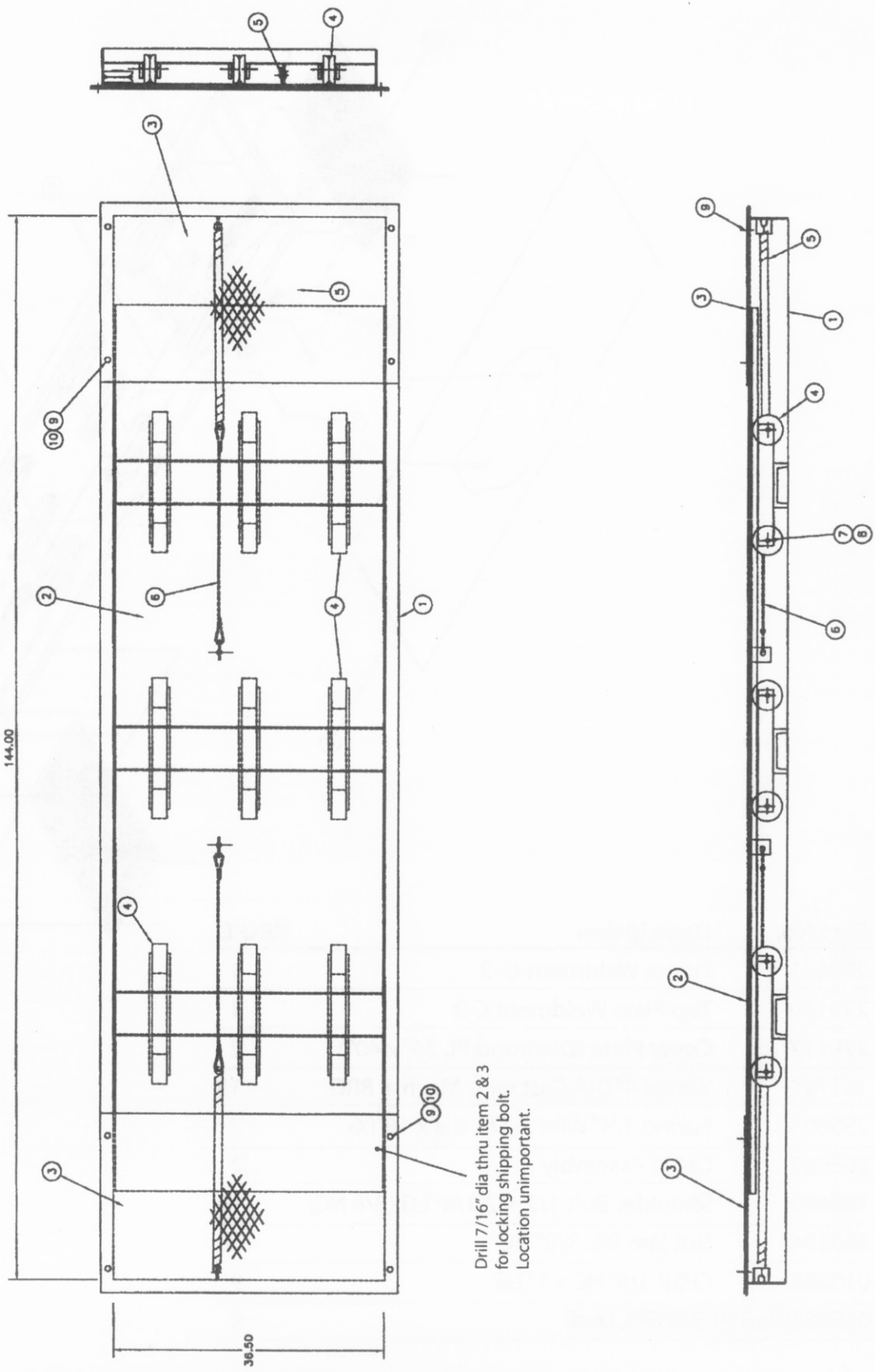
C-3 and C-4 Correlators

Hanna part numbers: 400085 and 400010



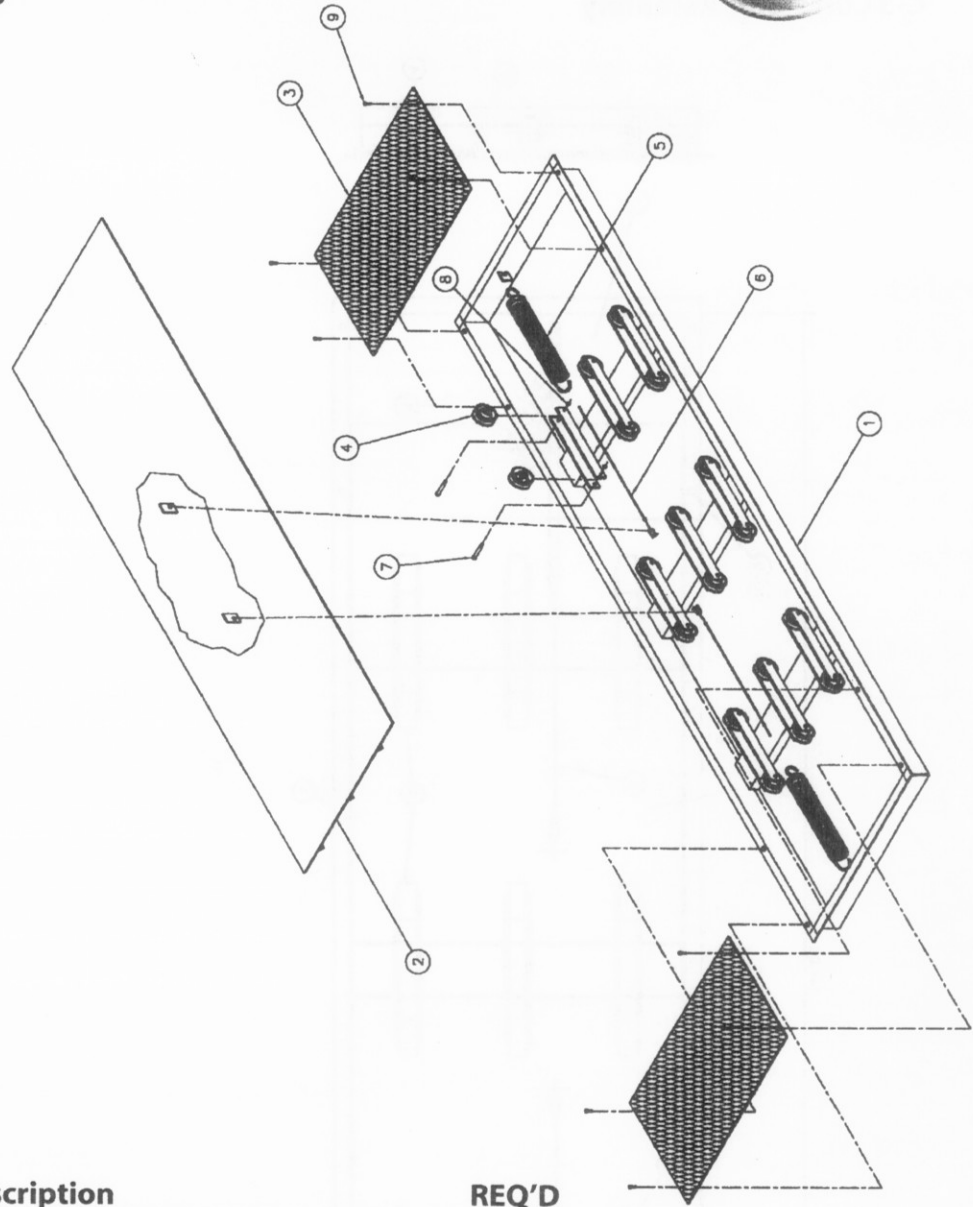


C-3 Correlator Assembly





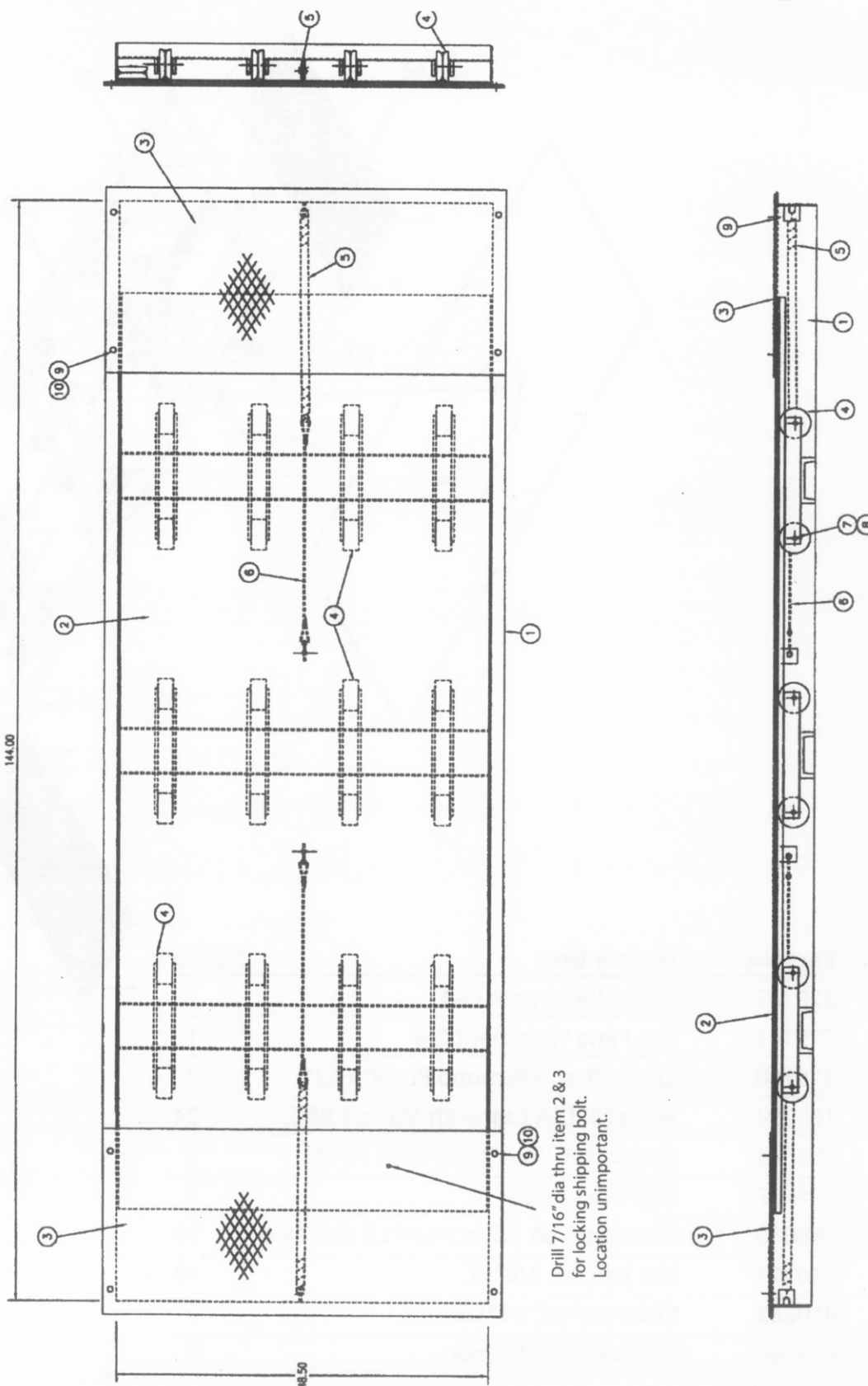
C-3 Correlator Assembly



Item	Part No.	Description	REQ'D
1	279091	Frame Weldment C-3	1
2	279109	Top Plate Weldment C-3	1
3	279117	Cover Plate (Diamond PL 24" x 40")	2
4	161794	Wheel 4" DIA Cast with Mach. # BRG.	18
5	255604	Spring 1/4" Wire 2-1/2' dia x 18' LG	2
6	265967	Cable Assembly	2
7	188680	Shoulder Bolt 1/2' x 2-1/4" LG (3/8 NC)	18
8	346304	Nut jam Blk. 3/8" NC	18
9	010285	CPSR 3/8" NC x 1" LG	9
10	015586	Washer 3/8' SPL Lock	8

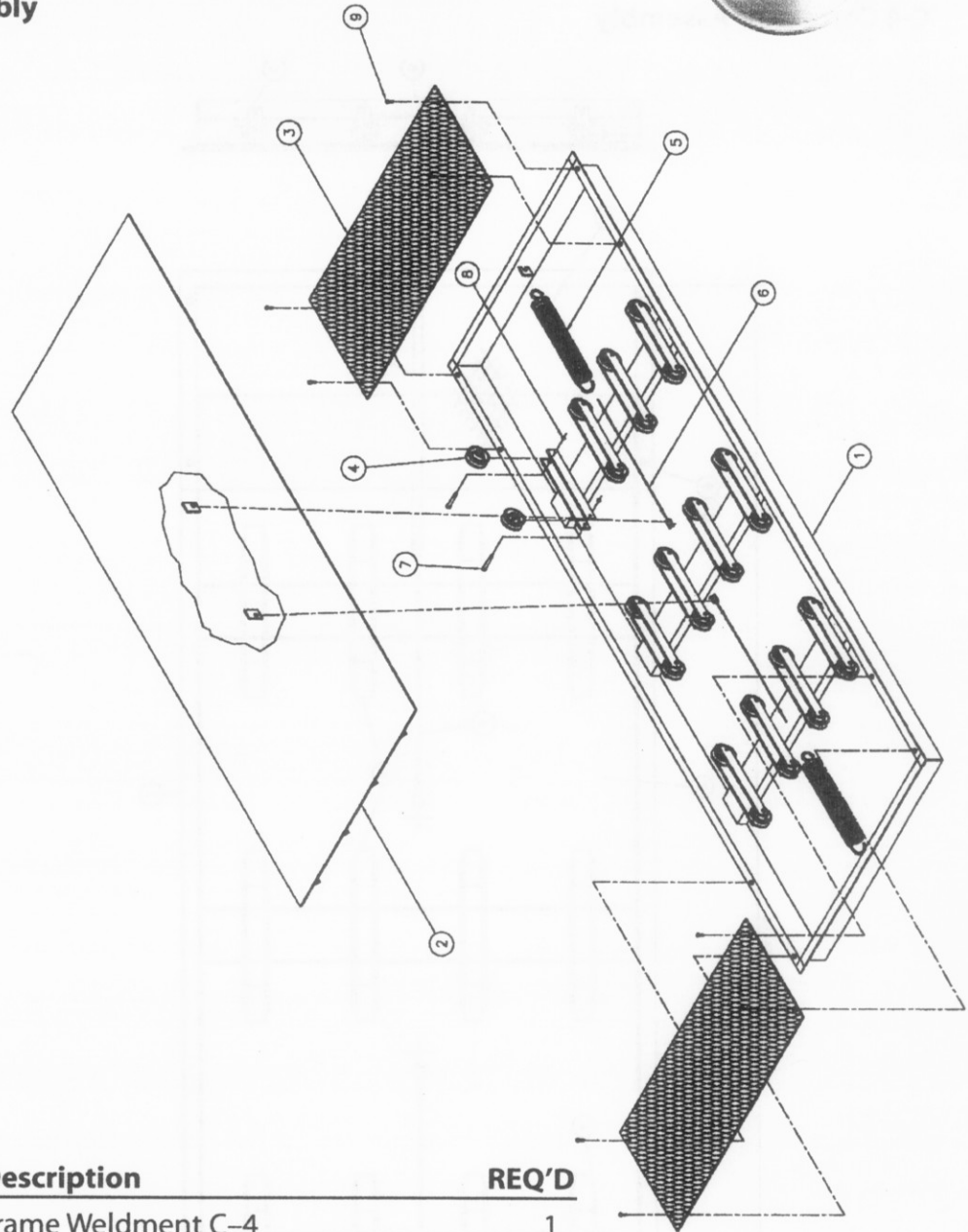


C-4 Correlator Assembly





C-4 Correlator Assembly



Item	Part No.	Description	REQ'D
1	279133	Frame Weldment C-4	1
2	279141	Top Plate Weldment C-4	1
3	279158	Cover Plate (Diamond PL 24" x 52")	2
4	161794	Wheel 4" DIA Cast with Mach. # BRG.	24
5	255604	Spring 1/4" Wire 2-1/2' dia x 18' LG	2
6	265967	Cable Assembly	2
7	188680	Shoulder Bolt 1/2' x 2-1/4" LG (3/8 NC)	18
8	346304	Nut jam Blk. 3/8" NC	18
9	010285	CPSR 3/8" NC x 1" LG	9
10	015586	Washer 3/8" SPL Lock	8



PREVENTATIVE MAINTENANCE

Generally, preventative maintenance consists of routine inspection and cleaning. At least 50% of all system failures are a result of not properly maintaining the correlator.

Although the correlator can be purchased with the galvanized option, it is usually made from painted, mild steel. After two or three hundred cars have driven over it, the paint will undoubtedly wear off, and a car wash is a hotbed for rust and corrosion. In other words, the worse it looks, the more it wears, and the more expensive it will be to repair. We recommend that a repair and repaint mentality be assumed on the part of the owner.

Weekly:

- a. Inspect the correlator bed to insure that it has freedom of movement and is free of debris.
- b. Inspect the weld points to insure there is no evidence of distortion or cracking.

Monthly:

- a. Remove the protective covers from both ends of the correlator.
- b. Inspect the springs and retainers for security and tension. Replace and retension as necessary.
- c. Inspect the correlator casters and inserted bushings for serviceability and wear. Replace damaged casters and bearings with new. If it is necessary to replace the castor, also replace the shoulder bolt and retaining nut.
- d. Re-install the protective covers.
- e. Touch-up paint as required.

TROUBLE SHOOTING

Correlator won't move:	Check the bed for damage or debris
	Check the correlator castors for wear or damage
	Check the springs and retainers.



Hanna Car Wash Systems

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