



6245 State Road
Philadelphia
PA 19135-2996

Telephone 215-624-4800
800-344-4802
FAX: 215-624-6966

TECHNICAL MANUAL

FOR

TRAY DRYER

MODEL
TD321-3



TECHNICAL MANUAL
including Installation, Operation, and Maintenance Instructions
FOR
TRAYDRYERS
MODEL: TD 321-3



Thank you for Purchasing this quality Insinger product.

On the space provided please record the Model, Serial Number and Start-up date of this unit:

Model: _____

Serial Number: _____

Start-up Date: _____

When referring to this equipment please have this information available.

Each piece of equipment at Insinger is carefully tested before shipment for proper operation. If the need for service should arise please contact your local Authorized Insinger Service Company. A Service Network Listing is provided within this manual. Check this list for your local authorized servicer.

For proper activation of the *Insinger Limited Warranty* a SureFire™ Start-up should be completed on your machine. Refer to the Introduction section in this manual for an explanation of Insinger's SureFire™ Start-up and Check-out Program.

Please read the Insinger Limited Warranty and all installation and operation instructions carefully before attempting to install or operate your new Insinger product.

To register your machine for warranty by phone, fax, or the internet or for answers to questions concerning installation, operation, or service contact our Technical Services Department:

Toll-Free	800.344.4802
Fax	215.624.6966
Email	service@insingermachine.com
World-Wide Web	http://www.insingermachine.com

Thank you.
Insinger



PART 1
TECHNICAL INFORMATION

TRAYDRYER
MODEL: TD 321-3
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Thank you for Purchasing this quality Insinger product.

On the space provided please record the Model and Serial Number of this unit:

Model: _____

Serial Number: _____

When referring to this equipment please have these numbers available.

Each piece of equipment at Insinger is carefully tested before shipment for proper operation. If the need for service should arise please contact your local Authorized Insinger Service Company. If you do not know the name of your Authorized Service Company please contact our Technical Services Department toll-free, 800/344-4802.

For proper activation of the *Insinger Limited Warranty* the **Warranty Registration Card** provided with your unit must be returned within 30 days of the installation date.

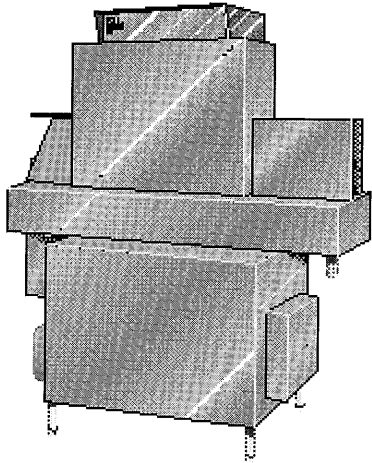
Please read the Insinger Limited Warranty and all installation and operation instructions carefully before attempting to install or operate your new Insinger product.

Thank you.

Insinger Machine Company

TD 321-3

AUTOMATIC TRAY DRYER OPTIONAL COMPONENT

**DESIGN**

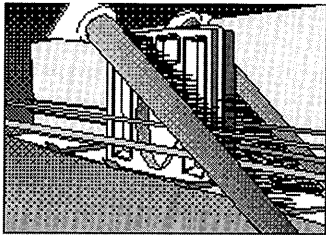
Automatic conveyor, tray dryer with Insinger's unique Air Wiper design. Capacity is 528 trays per hour (based on a 15" tray) with an adjustable conveyor speed. Designed for left or right hand conveyor travel, as specified. Furnished only as an added component to a TRAC 321-2 or TRAC 321-2 RPW tray washer.

STANDARD EQUIPMENT

- S/S frame, legs and feet
- Top mounted NEMA 12 control panel
- SureFire™ Start-Up and Check-Out Service

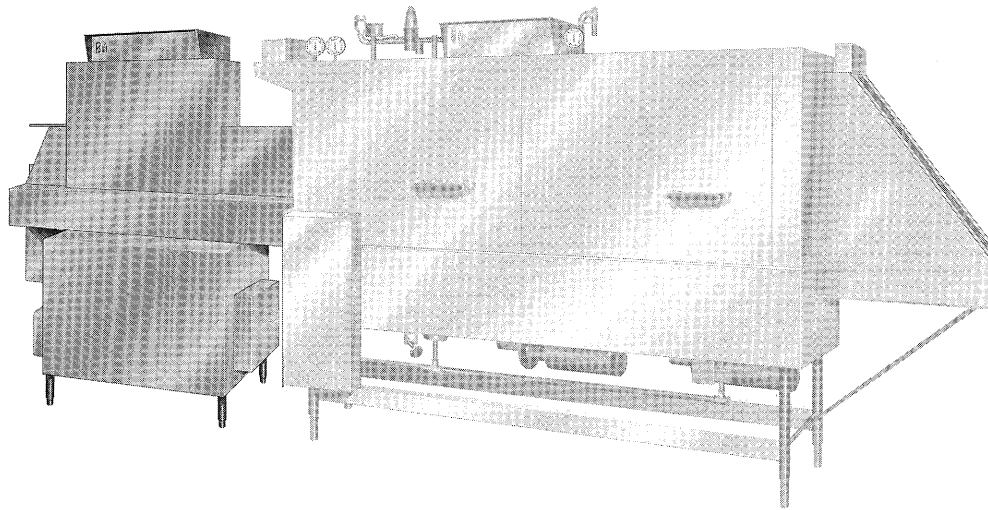
OPTIONAL ACCESSORY EQUIPMENT

- Security package



The TD 321-3 completes Insinger's powerful tray drying system using the unique Air Wiper (shown at left) which leaves the trays virtually free of water.




SPECIFICATIONS

CONSTRUCTION - Hood and tank constructed of 16 gauge 18-8 type 304 S/S. Hood unit of all welded seamless construction. S/S frame, legs and feet.

CONVEYOR - One S/S roller conveyor chain with tray cradles, through both washer and dryer. Width between guide rails is factory adjustable from 1.5" to 3.7". Conveyor accommodates trays up to 15" high. Conveyor drive system includes direct drive gear motor with frictionless, trouble-free overload release system continuously running.

CONTROLS - Top-mounted control cabinet, NEMA 12 rated, housing motor controls and overload protection, transformer and contactor. All controls safe low voltage 24 VAC.

BLOWER - 10 HP regenerative blower with Insinger's specially designed "air wiper" mounted on either side of conveyor. "Air wipers" are mounted on a diagonal to sweep water in controlled movement preventing splashing and uneven results.

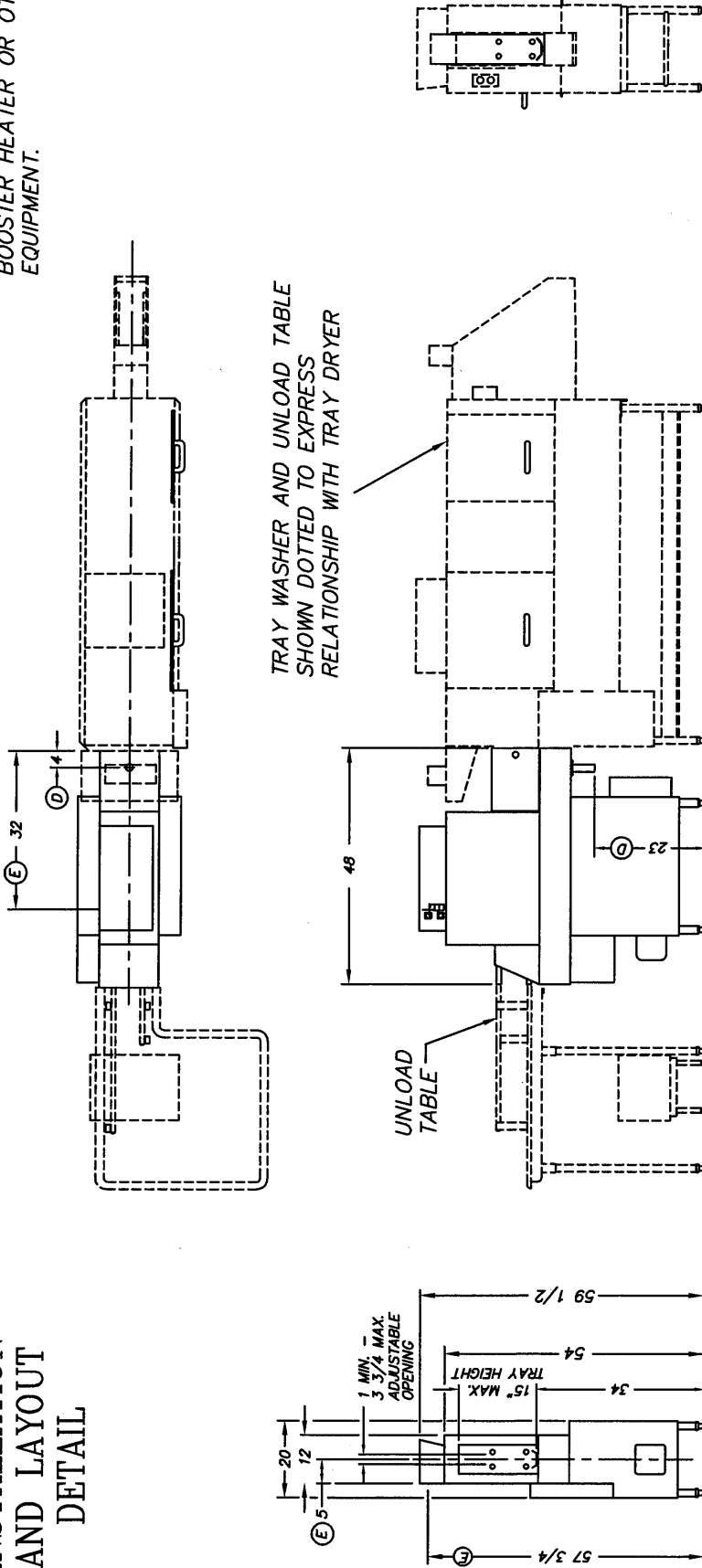
DRAIN - All water is drained back into TRAC 321-2 or TRAC 321-2 RPW with a gravity drain connection. Factory installed drain connection to tray washer provided if dryer is ordered with a TRAC 321-2 or TRAC 321-2 RPW.

UNLOAD TABLE - A stainless steel tray unload table receives clean trays. Table constructed with guide rails which ease the trays onto table.

Capacity per hour	Motor size	Shipping weight	Additional current draw	Electric Customer Fuse amps
528 trays	10 hp (blower) 1/8 hp (conveyor)	700 lbs.	208/3/60.....	31.0FRN-R-60
			240/3/60.....	28.2FRN-R-60
			380/3/50.....	17.0FRS-R-35
			480/3/60.....	14.1FRS-R-30

INSTALLATION AND LAYOUT DETAIL

NOTE:
INSTALLATION ON EXISTING UNITS
MAY REQUIRE RELOCATION OF
BOOSTER HEATER OR OTHER
EQUIPMENT.



TRAY DRYER
UNLOAD END SHOWN

RIGHT TO LEFT FEED

NOTE: HOOK UP KIT FOR CONNECTION TO INSINGER
TRAY WASHER AVAILABLE, DWG. # 1361-105.

Information and Specifications
Subject to Change Without Notice.

ELECTRICAL CHARACTERISTICS	
VOLTAGE	AMPS
208	31
230	28.2
460	14.1
380	17
CUSTOMER FUSE	
FRN-R-60	
FRN-R-60	
FRS-R-30	
FRS-R-35	

INSTALLATION CONNECTIONS	
LTR	DESCRIPTION
E	ELECT. SERVICE - BLOWER MTR.
D	DRAIN
	1 1/2 O.D. TUBE
	TO HP
	SIZE

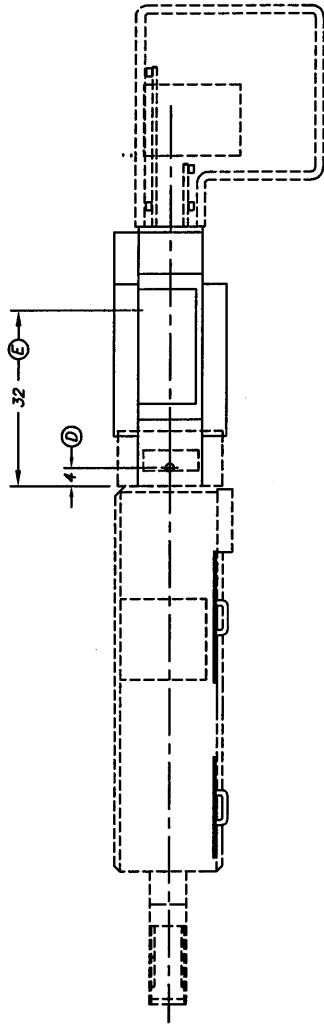
THE INFORMATION ON THIS DRAWING IS THE PROPRIETARY PROPERTY OF INSINGER AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. THE COMPANY SHALL BE SUBJECT TO APPLICABLE LEGAL ACTION.

TD 321-3 TRAY DRYER
SINGLE TANK CONVEYOR TYPE DISHWASHING MACHINE
Philadelphia, PA 19135
Insinger
FAX (215) 624-4800
DRWN: EMM 01.17.00 SCALE 1/2" = 1'
REV: PI 04.10.07
FILE: STD \TD321-3R

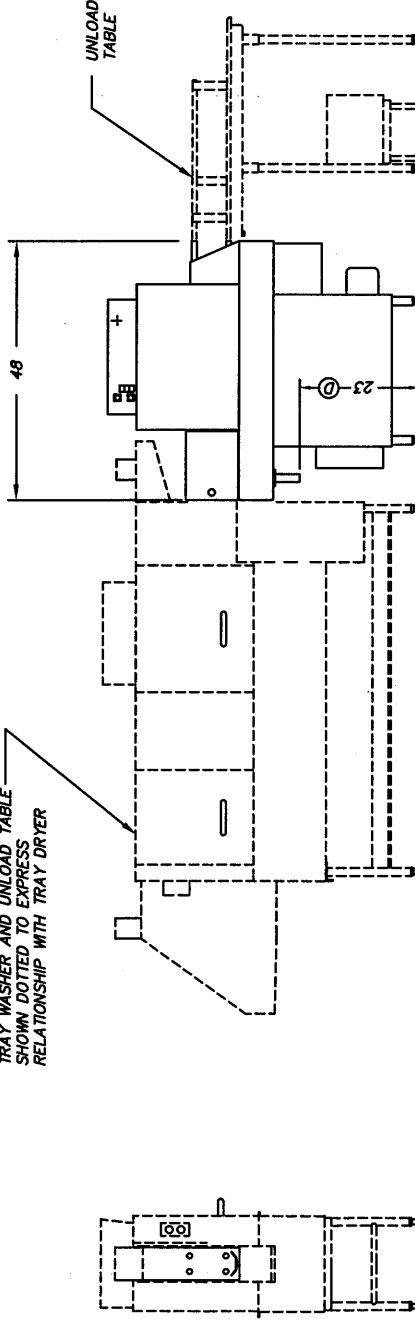
REV	DWG. NO.
F	TD321-3R

NOTE:

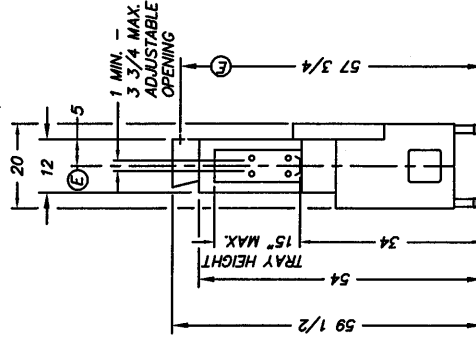
INSTALLATION ON EXISTING UNITS
MAY REQUIRE RELOCATION OF
BOOSTER HEATER OR OTHER
EQUIPMENT.



TRAY WASHER AND UNLOAD TABLE
SHOWN DOTTED TO EXPRESS
RELATIONSHIP WITH TRAY DRYER



**INSTALLATION
AND LAYOUT
DETAIL**



TRAY DRYER
UNLOAD END SHOWN

← LEFT TO RIGHT FEED

NOTE: HOOK UP KIT FOR CONNECTION TO INSINGER
TRAY WASHER AVAILABLE. DWG. # 1361-105.

Information and Specifications
Subject to Change Without Notice.

ELECTRICAL CHARACTERISTICS	
VOLTAGE	AMPS
208	31
230	28.2
460	14.1
380	17

THE INFORMATION ON THIS DRAWING IS THE PROPRIETARY PROPERTY OF INSINGER. IT IS TO BE USED ONLY FOR THE PARTS LISTED HEREIN. NO PARTS OR MATERIALS SHALL BE USED IN THE REPRODUCTION OF THIS DRAWING OR THE MANUFACTURE OF A SIMILAR OR IDENTICAL PART, COMPONENT OR ASSEMBLY WITHOUT THE WRITTEN PERMISSION OF INSINGER. THE PARTS LIST SHALL BE THE AUTHORITY IN ALL APPROPRIATE LEGAL ACTIONS.

TD 321-3 TRAY DRYER		Philadelphia, PA 19135	
SINGLE TANK CONVEYOR TYPE DISHWASHING MACHINE		(215) 824-4800	
Insinger		FAX (215) 824-6986	
DRWN. EMM	01.17.00	SCALE	DWG. NO.
REV	PI	1/2" = 1'	TD321-3L
	FILE: STD\TD321-3L		F

INSTALLATION CONNECTIONS	
LTR	DESCRIPTION
E	ELECTRICAL CONNECTION
D	DRAIN
	SIZE
	10 HP
	1 1/2 O.D. TUBE

12/12/2002

SERVICE NETWORK LISTING

ALABAMA

Greene's Service Company
3515 Spann St.
Harvest, AL 35749
256.859-1816

Jones-McLeod Appliance Service
1616 7th Avenue, North
Birmingham, AL 35203
205.251-0159
205.322-1440 (fax)
800.821-1150
www.jones-mcleod.com

Total Equipment Service Co.
2302 3rd St.
Attala, AL 37954
256.538-0261

ALASKA

J & J Service
5001 Eagle St.
Anchorage, AK 99503
907.561-1060

ARIZONA

Commercial Food Equipment
2010 E. University Drive #23
Tempe, AZ 85281
480.927-9262
480.927-9266 (fax)

ARKANSAS

Bromley Parts and Service, Inc.
10th & Ringo
Little Rock, AR 72201
501.374-0281
501.661-0223 (fax)
800.482-9209
www.bromleyparts.com

Scott Service Co., Inc.
7123 I-30, Suite 51
Little Rock, AR 72209
501.562-1863
501.562-2308

CALIFORNIA

Chapman Appliance Service
1784 San Diego Ave.
San Diego, CA 92110
619.298-7106
619.298-7591 (fax)

Commercial Appliance
165 Commerce Circle, Suite B
Sacramento, CA 95815
916.567-0203
916.567-0324 (fax)
800.464-2222
www.commercialappliance.com

Magna Mechanical¹
724 Ave. B, Suite A
National City, CA 91950
619.239-8008

Ridge Electric Motor Company
1235 G St.
Fresno, CA 93706
559.268-5031

Sterling Service
664 W. Hawthorne St.
Glendale, CA 91204-1002
818.243-1234
818.243-4021 (fax)
800.396-0010
www.sterlingsru.com

P&D Appliance
100 S. Linden Ave
South San Francisco, CA 94080
800-424-1414
650-635-1900
650-635-1919 (fax)

P&D Appliance
4220 "C" Roseville Rd
North Highlands, CA 95660
800-824-7219
916-974-2772
916-974-2774 (fax)

COLORADO

General Parts
4910 Fox Street, Unit F
Denver, CO 80239
303.373.2714
303.373.2724 (fax)

General Parts
Colorado Springs, CO 80901
303.373.2714

General Parts
Fort Collins, CO 80535
303.373.2714

Metro Appliance Service
1640 S. Broadway
Denver, CO 80210
303.778-1126
303.778-0268 (fax)
800.525-3532
www.metroapplianceservice.com

Sammons Refrigeration
2938 Janitell Rd.
Colorado Spring, CO 80906
719.538-9165
719.538-9170 (fax)

CONNECTICUT

A-Tech Service
161 San Rico Dr.
Manchester, CT 06045
860.649-6627
860.649-7882 (fax)
800.832-8324

DELAWARE

Insinger Machine Company
6245 State Road
Philadelphia, PA 19135
215.624-4800
215.624-6966 (fax)
800.344-4802
www.insingermachine.com

DISTRICT of COLUMBIA

Equipment Engineering Co, Inc.
7573 Gary Road
Manassas, VA 22110
703.631-1575
703.369-2082 (fax)

FLORIDA

A.L.T. Service Company
5621 Crawfordville Rd.
Tallahassee, FL 32310
850.878-5343
850.656-6810 (fax)

1. These companies provide Navy Sales & Service support only. They are not intended for commercial use.

12/12/2002

SERVICE NETWORK LISTING

FLORIDA (con't)

BGSI, Inc
3121 NW 16th Terrace
Pompano Beach, FL 33064
954.971-0456
954.973-1825 (fax)
800.253-0200
www.bgsiflorida.com

BGSI, Inc
3311 Bartlett Ave.
Orlando, FL 32811
407.316-8010
407.316-0279 (fax)
888.399-2474
www.bgsiflorida.com

Commercial Appliance Service
8416 Laurel Fair Circle
Building 6, Suite 114
Tampa, FL 33610
813.663-0313
813.663-0212 (fax)
800.282-4718
www.comapp.com

Commercial Appliance Repair
9507 Sandpiper St.
Pensacola, FL 32514
850.478-5533
850.478-7062 (fax)

JS Equipment
19881 Date Palm Drive
Sugarloaf Key, FL 33042
305.745-3289

Specialty Marine Supply¹
2057 Mayport Rd.
Atlantic Beach, FL 32233
904.247-3303
904.247-6403 (fax)

Whaley FoodService Repairs
8421 Atlantic Blvd.
Jacksonville, FL 32211-8737
904.725-7800
904.725-7328 (fax)
800.824-5843
www.whaleyfoodservice.com

GEORGIA

Adcox Service Company, Inc
500-4 Hillcrest Indl Blvd
Macon, GA 31204
404.361-8010
404.361-3907 (fax)
800.722-6434

**Georgia Con't
SRS**
2200 Norcross Parkway
Suite 210
Norcross, GA 30071
800-235-6516
770-446-6177
770-446-3157 (fax)

Food Equipment Technology
4786 Lakepark Court
Lilvern, GA 30247
770.638-8600
770.275-6585 (fax)
770.377-5382 (cell)

**Frothingham Commercial
Services**
PO Box 320
Evans, GA 30809-0320
706.863-8609

Total Service of Albany
835 Flint Ave.
Albany, GA 31701
912.888-2302
912.883-1548 (fax)
800.648-8321

Whaley FoodService Repairs
109-A Owens Industrial Drive
Savannah, GA 31405
912.447-0827
912.447-0826 (fax)
www.whaleyfoodservice.com

HAWAII

**Food Equipment Service
Company**
300 Puuhale Rd.
Honolulu, HI 96819
808.847-4871
808.842-1560 (fax)

IDAHO

Ron's Service
703 E. 44th St., Suite 10
Boise, ID 83714
208.375-4073
208.375-4402 (fax)

ILLINOIS

Cone's Repair Service
2408 40th Ave.
Moline, IL 61265
309.797-5323

Eichenauer Services
130 S. Oakland
Decatur, IL 62522
217.429-4229
217.429-0226 (fax)
www.esiquality.com

Eichenauer Services
1066 McClure
Peria, IL 61604
217.359-4200
217.398-2960 (fax)
www.esiquality.com

General Parts
248 James Street
Bensenville, IL 60106
630.595.3300
630.595.0003 (fax)

Major Appliance Service
4330 Prescott Ave.
Lyons, IL 60534
708.447-4100
708.447-4157 (fax)

INDIANA

Commercial Parts & Service
5310 E. 25th St.
Indianapolis, IN 46218
317.251-9255
317.549-6282 (fax)
800.727-8710
www.commercialparts.com

General Parts
Indianapolis, IN
800.880.3604
800.880.5027 (fax)

IOWA

Cones Repair Service, Inc.
1056 27th Ave, SW
Cedar Rapids, IA 52404
319.365-3325
800.716-7070

Goodwin Service Co., Inc.
2900 Delaware Ave.
Des Moines, IA 50317
515.262-9308
515.262-2936 (fax)
800.372-6066
www.goodwintucker.com

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