

# **Hodge Clemco Ltd**

# **Abrasive Recovery System**

## **Owner's Manual**

Date of Issue 06/03/06 TSOM 252F pt.2

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## **Machinery Directive**

(89/392/EEC amended by 91/368/EEC, 93/44/EEC and 93/68/EEC)

### **EC Declaration of Conformity**

PM Gallm.

We HODGE CLEMCO LTD declare that the supplied equipment when installed and used in accordance with the owners manual provided, conforms with the essential health and safety requirements of the above Directive(s)

**Engineering Manager** 

Managing

director

#### MAINTENANCE INSPECTION CONTRACT

In response to numerous requests we are now able to offer a Maintenance Inspection Contract for your Clemco Equipment.

These requests have been made by customers who appreciate the benefits of regular inspection/servicing on a planned basis. The remedial work that follows a breakdown or worse, the need for early equipment replacement due to accelerated wear may easily exceed the cost of a Maintenance Inspection Contract. If you would like further details please contact our Customer Services Department on 0114 2548811

A request for more information does not represent any form of commitment on your behalf, so can you afford to say 'NO' at this stage?

We look forward to hearing from you soon.

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### **ABRASIVE CLEANER**

## Operation

Abrasive material leaving the Bucket Elevator via the rubber hose passes through the inlet hopper into the screening drum. The latter allows the smaller particles to fall through its perforated outer skin whilst traversing the larger particles along its internal scroll before discharging them into the debris chute. A swinging Baffle causes the fine abrasive material leaving the screening drum to fall in a thin, wide curtain. Air is caused to flow through this curtain taking with it fines and dust, leaving the abrasive particles to fall into the Blast Machine for reuse.

#### **Adjustments**

Swinging Baffle is provided with adjustment rods carrying weights of which can be moved away from the Baffle to increase it's loading until a thin even abrasive curtain is formed.

If the curtain is:

- a) too narrow; the air will flow around and not through increase baffle loading.
- too thick; fines and dust will not be removed efficiently increase baffle loading
- too thin; flow will be insufficient and material will build up decrease baffle loading.

#### **Ventilation Outlet Blast Gate**

With Abrasive Cleaner and Dust Collector running close Blast Gate completely. Open Access Door and observe material passing through cleaner. Slowly open Blast Gate until maximum amount of dust is removed without drawing off usable abrasive. Lock Blast Gate in position.

#### **Separation Plate**

Move Separation Plate to full rearward position. Start Abrasive Cleaner and Dust Collector. Place white card or similar under material flow. (There should be abrasive and some dust falling on to card). Move Separation Plate forward until dust no longer falls on to card - only reusable abrasive. (Dust but not reusable abrasive should appear on the tip of the Separation Plate). Lock the Separation Plate in position.

#### **Screening Drum Removal**

Remove nuts and bolts from Separator top cover. Remove Separator top cover.

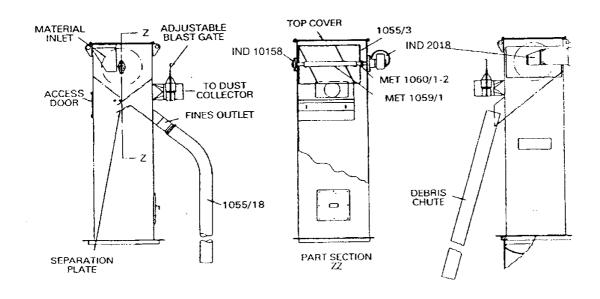
Support the weight of the Screening Drum IND 2012 via a rope sling. Remove the four mounting bolts for the geared motor unit IND 2018. Remove the geared motor unit by pulling its shaft from the shaft coupling IND 2014/15. Remove the outer half of the shaft coupling IND 2015. Slacken the grub screws in the flanged bearing IND 10158.

Slide Screening Drum sideways until shaft IND 2013 clears bearing IND 10158 Remove Screening Drum through top of separator. Replace in reverse order.

#### **Spares List**

Description	Part No.
Screening Drum	IND 2012
Drum Shaft	IND 2013
Shaft Coupling	IND 2014/15
Shaft Bearing	IND 10158
Geared Motor Unit	IND 2018

#### ABRASIVE CLEANER



#### **BUCKET ELEVATOR**

#### **Belt Adjustment**

Remove bottom elevator access plate.

Slacken lock nuts on the take-up frame MET 1105/11. Raise the take-up frame bearings until the belt 1105/1 is taught but not stretched. Run belt to ensure central running on pulleys. If the belt runs to one side raise the take-up frame bearing on that side (alternatively lower the opposite frame) until even running is obtained with a correctly tensioned belt. Refit bottom access plate.

#### **Belt Replacement**

Remove bottom access plate.

Slacken lock nuts and lower take-up frame bearings MET 1105/11 to lowest position Pull the belt 1105/1 round until the joint 1105/2 is opposite the access door. Disconnect the joint and remove the old belt. Refit the new belt and connect the joint (This is helped if a piece of light rope is attached to the old belt before removal). Adjust the belt tension as previously described. Refit the bottom access plate.

#### Removing the Geared Motor (IND 2029)

Remove the bolt attaching the turnbuckle to geared motor. Remove the gearbox outer cover plate by first removing the four socket head screws. Remove the set screw and washer from the end of the drive shaft MET 1105/8. Pull the geared motor off the drive shaft. Replace in reverse order.

#### Pulley Replacement (IND 2031 and IND 2044)

Remove the belt as previously described. Remove top and bottom access plates. Remove clamp screws from pulleys (IND 2031 and/or IND 2044). Remove pulley halves from shaft. Replace in reverse order.

#### Bearing Replacement (IND 10155 and IND10156)

Remove pulleys as previously described. Slacken grub screws attaching bearings to shafts. Remove bearing mounting bolts. Remove bearings and shafts. Replace in reverse order.

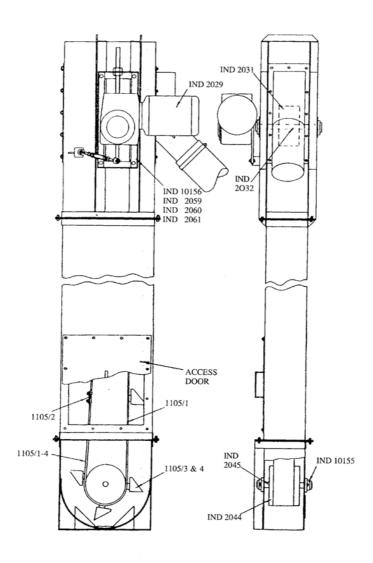
#### **Elevator Parts List**

Description Part No.

Belt c/w buckets and fasteners (state length required) 1105/1-4

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Belt (state length required)	1105/1
Belt Fasteners (2 required/belt)	1105/2
Bucket	1105/3
Bucket Fasteners (2 required/bucket)	1105/4
Top Pulley – 150mm dia	IND 2031
Bottom Pulley – 200mm dia	IND 2044
Bottom Idler Shaft	IND 2045
Top Drive Shaft	IND 2032
Flanged Bearing	IND 10155
Geared Motor Unit 1 HP	IND 2029
Take-up Slide Shaft c/w 2 nut	IND 2059
Take-up Slide Collar	IND 2061
Take-up Bearing	IND 10156



### **MAINTENANCE/SERVICE RECORD**

DATE	DETAILS	SIGNATURE

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