

Transnet Freight Rail, a division of

TRANSNET SOC LTD

Registration Number 1990/000900/30

[hereinafter referred to as **Transnet**]

REQUEST FOR QUOTATION [RFQ] NO. RME CPT 303/2015

**FOR THE SUPPLY AND DELIVERY OF 60KG FLANGE LUBRICATORS COMPLETE
WITH RUBBER INSULATORS**

**FOR DELIVERY TO: TRANSNET FREIGHT RAIL, BELLVILLE SQUARE STORES,
CAPE TOWN**

ISSUE DATE: 20 JULY 2015

CLOSING DATE: 04 AUGUST 2015

CLOSING TIME: 10:00

RFQ for the Supply and Delivery of 60 kg Flange Lubricators Complete with Rubber Insulators

Section 1 NOTICE TO BIDDERS

Quotations which must be completed as indicated in Section 2 of this RFQ are to be submitted as follows:

METHOD:	Hand delivery, Courier (no fax and email will be accepted and late tenders will not be accepted)
CLOSING VENUE:	Ground Floor, Transnet Park, Robert Sobukwe Road, Bellville

1 Responses to RFQ

Responses to this RFQ [**Quotations**] must not include documents or reference relating to any other quotation or proposal. Any additional conditions must be embodied in an accompanying letter.

2 Broad-Based Black Economic Empowerment [B-BBEE]

Transnet fully endorses and supports the Government's Broad-Based Black Economic Empowerment Programme and it would therefore prefer to do business with local business enterprises who share these same values. As described in more detail in the attached B-BBEE Claim Form Transnet will allow a "preference" to companies who provide a valid B-BBEE Verification Certificate.

The value of this bid is estimated to be below R1 000 000 (all applicable taxes included); and therefore the **80/20** system shall be applicable.

Respondents are required to complete Annexure A [the B-BBEE Preference Point Claim Form] and submit it together with proof of their B-BBEE Status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status.

Note: Failure to submit a valid and original B-BBEE certificate or a certified copy thereof at the Closing Date of this RFQ will result in a score of zero being allocated for B-BBEE.

3 Communication

Respondents are warned that a response will be liable for disqualification should any attempt be made by a Respondent either directly or indirectly to canvass any officer(s) or employee of Transnet in respect of this RFQ between the closing date and the date of the award of the business.

A Respondent may, however, before the closing date and time, direct any written enquiries relating to the RFQ to the following Transnet employee:

Name:	Tshegofatso Shaku	Email:	Tshegofatso.Shaku@transnet.net
Telephone:	021 940 1876		

Respondents may also, at any time after the closing date of the RFQ, communicate with the Secretariat of the Transnet Acquisition Council on any matter relating to its RFQ response:

Telephone	021 940 1896	Email:	Iwan.Theron@transnet.net
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4 Legal Compliance

The successful Respondent shall be in full and complete compliance with any and all applicable national and local laws and regulations.

RFQ for the Supply and Delivery of 60 kg Flange Lubricators Complete with Rubber Insulators

5 Changes to Quotations

Changes by the Respondent to its submission will not be considered after the closing date and time.

6 Pricing

All prices must be quoted in South African Rand on a fixed price basis, excluding VAT.

7 Prices Subject to Confirmation

Prices quoted which are subject to confirmation will not be considered.

8 Binding Offer

Any Quotation furnished pursuant to this Request shall be deemed to be an offer. Any exceptions to this statement must be clearly and specifically indicated.

9 Disclaimers

Transnet is not committed to any course of action as a result of its issuance of this RFQ and/or its receipt of a Quotation in response to it. Please note that Transnet reserves the right to:

- modify the RFQ's goods / service(s) and request Respondents to re-bid on any changes;
- reject any Quotation which does not conform to instructions and specifications which are detailed herein;
- disqualify Quotations submitted after the stated submission deadline;
- not necessarily accept the lowest priced Quotation or an alternative bid;
- reject all Quotations, if it so decides;
- place an order in connection with this Quotation at any time after the RFQ's closing date;
- award only a portion of the proposed goods / service/s which are reflected in the scope of this RFQ;
- split the award of the order/s between more than one Supplier/Service Provider should it at Transnet's discretion be more advantageous in terms of, amongst others, cost or developmental considerations ;
or
- make no award at all.

Should a contract be awarded on the strength of information furnished by the Respondent, which after conclusion of the contract, is proved to have been incorrect, Transnet reserves the right to cancel the contract.

Transnet reserves the right to award business to the highest scoring bidder/s unless objective criteria justify the award to another bidder.

Transnet reserves the right to conduct Post Tender Negotiations (PTN) with selected Respondents or any number of short-listed Respondents, such PTN to include, at Transnet's discretion, any evaluation criteria listed in the RFQ document.

Should the preferred bidder fail to sign or commence with the contract within a reasonable period after being requested to do so, Transnet reserves the right to award the business to the next highest ranked bidder, provided that he/she is still prepared to provide the required goods at the quoted price.

10 Specification/Scope of Work

Refer to Annexure B

RFQ for the Supply and Delivery of 60 kg Flange Lubricators Complete with Rubber Insulators

Transnet urges its clients, suppliers and the general public to report any fraud or corruption to

TIP-OFFS ANONYMOUS : 0800 003 056

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FOR THE SUPPLY AND DELIVERY OF 60kg FLANGE LUBRICATORS COMPLETE WITH RUBBER INSULATORS

CLOSING VENUE: THE SECRETARIAT, ACQUISITION COUNCIL, GROUND FLOOR, TRANSNET PARK, ROBERT SOBUKWE ROAD, BELLVILLE

CLOSING DATE & TIME: 04 AUGUST 2015 AT 10:00

VALIDITY PERIOD: 60 (sixty) Business Days

SECTION 2

EVALUATION CRITERIA AND RETURNABLE DOCUMENTS

EVALUATION CRITERIA

Transnet will utilise the following criteria [not necessarily in this order] in choosing a Supplier/Service Provider, if so required:

Criterion/Criteria	Explanation
Administrative responsiveness	Completeness of response and returnable documents
Substantive responsiveness	<ul style="list-style-type: none"> Prequalification criteria, if any, must be met and whether the Bid materially complies with the scope and/or specification given.
Final weighted evaluation based on 80/20 preference point	Pricing and price basis [firm] <ul style="list-style-type: none"> B-BBEE status of company - Preference points will be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table indicated in Annexure A: B-BBEE Claim Form.

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STAGE ONE: Test for Administrative Responsiveness

The test for administrative responsiveness will include the following:

Administrative responsiveness check
<ul style="list-style-type: none"> Whether the Bid has been lodged on time
<ul style="list-style-type: none"> Whether all returnable documents and/or schedules [where applicable] were completed and returned by the closing date and time
<ul style="list-style-type: none"> Verify the validity of all returnable documents

The test for administrative responsiveness [Stage One] must be passed for a Respondent's Proposal to progress to Stage Two for further pre-qualification

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STAGE TWO: Test for Substantive Responsiveness

The test for substantive responsiveness will include the following:

Check for substantive responsiveness
<ul style="list-style-type: none"> Whether any general pre-qualification criteria set by Transnet, have been met:
<ul style="list-style-type: none"> Whether the Bid contains a priced offer
<ul style="list-style-type: none"> Whether the Bid materially complies with the scope and/or specification given

The test for substantive responsiveness [Stage Two] must be passed for a Respondent's Proposal to progress to Stage Three for final evaluation

STAGETHREE: Evaluation and Final Weighted Scoring

Price Criteria [Weighted score 80 points]:

Evaluation Criteria
<ul style="list-style-type: none"> Commercial offer

Transnet will utilise the following formula in its evaluation of Price:

$$PS = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where:

- Ps = Score for the Bid under consideration
- Pt = Price of Bid under consideration
- $Pmin$ = Price of lowest acceptable Bid

Broad Based Black Economic Empowerment criteria [Weighted score 20 points]

- B-BBEE current scorecard / B-BBEE Preference Points Claims Form [Annexure A]

Preference points will be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table indicated in Annexure A:

B-BBEE Status Level of Contributor	Number of Points [Maximum 20]
1	20
2	18
3	16
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

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Evaluation Criteria	Final Weighted Scores
Price	80
B-BBEE - Scorecard	20
TOTAL SCORE:	100

11 Validity Period

Transnet desires a validity period of 60 [sixty] Business Days from the closing date of this RFQ.
 This RFQ is valid until _____.

12 Disclosure of Prices Quoted

Respondents must indicate here whether Transnet may disclose their quoted prices and conditions to other Respondents:

YES NO

13 Returnable Documents

Returnable Documents means all the documents, Sections and Annexures, as listed in the tables below.

All Returnable Sections, as indicated in the header and footer of the relevant pages, must be signed, stamped and dated by the Respondent.

a) Respondents are required to submit with their Quotations the **mandatory Returnable Documents** as detailed below.

Failure to provide all these Mandatory Returnable Documents at the Closing Date and time of this RFQ will result in a Respondent's disqualification. Respondents are therefore urged to ensure that all these Documents are returned with their Quotations.

Please confirm submission of these mandatory Returnable Documents by so indicating [Yes or No] in the tables below:

Mandatory Returnable Documents	Submitted [Yes or No]
SECTION 3 : Quotation Form/Price Schedule	

b) In addition to the requirements of section (a) above, Respondents are further required to submit with their Quotations the following **essential Returnable Documents** as detailed below.

Failure to provide all these Returnable Documents may result in a Respondent's disqualification. Respondents are therefore urged to ensure that all these documents are returned with their Quotations.

Returnable Document

Essential Returnable Documents	Submitted [Yes or No]
SECTION 2 : Evaluation criteria and list of returnable documents	
- SECTION 4 : RFQ Declaration and Breach of Law Form	
- Valid and original, or a certified copy, of your entity's B-BBEE Verification Certification as per the requirements stipulated in Annexure A: B-BBEE Claims Form Note: failure to provide these required documents at the closing date and time of the RFQ will result in an automatic score of zero being allocated for preference	
- Original valid Tax Clearance Certificate [Consortia / Joint Ventures must submit a separate Tax Clearance Certificate for each party]	
ANNEXURE A – B-BBEE Preference Points Claim Form	
ANNEXURE B-Scope of Work	

CONTINUED VALIDITY OF RETURNABLE DOCUMENTS

The successful Respondent will be required to ensure the validity of all returnable documents, including but not limited to its Tax Clearance Certificate and valid B-BBEE Verification Certificate, for the duration of any contract emanating from this RFQ. Should the Respondent be awarded the contract [**the Agreement**] and fail to present Transnet with such renewals as and when they become due, Transnet shall be entitled, in addition to any other rights and remedies that it may have in terms of the eventual Agreement, to terminate such Agreement forthwith without any liability and without prejudice to any claims which Transnet may have for damages against the Respondent.

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Respondent's Signature

Date & Company Stamp

Returnable Document

**SECTION 3
QUOTATION FORM**

I/We _____
hereby offer to supply the goods/services at the prices quoted in the Price Schedule below, in accordance with the conditions related thereto.

I/We agree to be bound by those terms and conditions in:

- the Standard RFQ Terms and Conditions for the Supply of Goods or Services to Transnet; and
- any other standard or special conditions mentioned and/or embodied in this Request for Quotation.

I/We accept that unless Transnet should otherwise decide and so inform me/us, this Quotation [and, if any, its covering letter and any subsequent exchange of correspondence], together with Transnet's acceptance thereof shall constitute a binding contract between Transnet and me/us.

I/We further agree that if, after I/we have been notified of the acceptance of my/our Quotation, I/we fail to deliver the said goods/service/s within the delivery lead-time quoted, Transnet may, without prejudice to any other legal remedy which it may have, cancel the order and recover from me/us any expenses incurred by Transnet in calling for Quotations afresh and/or having to accept any less favourable offer.

Price Schedule

I/We quote as follows for the goods required, on a "delivered nominated destination" basis, excluding VAT:

Item No	Description of Goods /Services	Unit of Measure	Quantity	Unit Price (ZAR)	Total Price (ZAR)
1	Moore and Steele (M&S) Rail Flange Lubricators for 60kg, Rail Complete with Rubber Insulators	Each	8		
Total Price (Excluding VAT)					

Delivery Lead-Time from date of purchase order: _____ [days/weeks]

Notes to Pricing:

- a) All Prices must be quoted in South African Rand, exclusive of VAT
- b) To facilitate like-for-like comparison bidders must submit pricing strictly in accordance with this price schedule and not utilise a different format. Deviation from this pricing schedule could result in a bid being disqualified.

Respondent's Signature

Date & Company Stamp

Returnable Document

Please note that should you have offered a discounted price(s), Transnet will only consider such price discount(s) in the final evaluation stage if offered on an unconditional basis.

By signing this Quotation Form the Respondent is deemed to acknowledge that he/she has made himself/herself thoroughly familiar, and agrees, with all the conditions governing this RFQ, including those contained in any printed form stated to form part hereof, including but not limited to the documents stated below and Transnet SOC Ltd will recognise no claim for relief based on an allegation that the Respondent overlooked any such condition or failed properly to take it into account for the purpose of calculating tendered prices or otherwise:

1. The following documents all of which are available on Transnet’s website or upon request:
 - 1.1. General Bid Conditions;
 - 1.2. Standard RFQ Terms and Conditions for the Supply of Goods or Services to Transnet;
 - 1.3. Supplier Integrity Pact;
 - 1.4. Non-disclosure Agreement; and
 - 1.5. Vendor Application Form and all supporting documents (first time vendors only)
 Alternatively, for all existing vendors, please provide vendor number(s) here:

Transnet Operating Division	Unique Vendor Number	Yes / No
Transnet Group		
TFR, etc.		

In the Yes/No column above please confirm that all the information e.g. company address and contact details, banking details, etc. are still correct as at the time of allocation of the vendor number(s). Alternatively, Respondents are required to provide the updated information with their bid submission.

SIGNED at _____ on this _____ day of _____ 20__

SIGNATURE OF WITNESSES

ADDRESS OF WITNESSES

1 _____
 Name _____

2 _____
 Name _____

SIGNATURE OF RESPONDENT’S AUTHORISED REPRESENTATIVE: _____

NAME: _____

DESIGNATION: _____

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SECTION 4

RFQ DECLARATION AND BREACH OF LAW FORM

NAME OF ENTITY: _____

We _____ do hereby certify that:

1. Transnet has supplied and we have received appropriate responses to any/all questions [as applicable] which were submitted by ourselves for RFQ Clarification purposes;
2. we have received all information we deemed necessary for the completion of this Request for Quotation [RFQ];
3. we have been provided with sufficient access to the existing Transnet facilities/sites and any and all relevant information relevant to the Supply of the Goods as well as Transnet information and Employees, and has had sufficient time in which to conduct and perform a thorough due diligence of Transnet's operations and business requirements and assets used by Transnet. Transnet will therefore not consider or permit any pre- or post-contract verification or any related adjustment to pricing, service levels or any other provisions/conditions based on any incorrect assumptions made by the Respondent in arriving at his Bid Price.
4. at no stage have we received additional information relating to the subject matter of this RFQ from Transnet sources, other than information formally received from the designated Transnet contact(s) as nominated in the RFQ documents;
5. we are satisfied, insofar as our entity is concerned, that the processes and procedures adopted by Transnet in issuing this RFQ and the requirements requested from Bidders in responding to this RFQ have been conducted in a fair and transparent manner; and
6. furthermore, we declare that a family, business and/or social relationship **exists / does not exist** [delete as applicable] between an owner / member / director / partner / shareholder of our entity and an employee or board member of the Transnet Group including any person who may be involved in the evaluation and/or adjudication of this Bid.
7. In addition, we declare that an owner / member / director / partner / shareholder of our entity **is / is not** [delete as applicable] an employee or board member of the Transnet Group.
8. If such a relationship as indicated in paragraph 6 and/or 7 exists, the Respondent is to complete the following section:

FULL NAME OF OWNER/MEMBER/DIRECTOR/
PARTNER/SHAREHOLDER:

ADDRESS:

Indicate nature of relationship with Transnet:

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[Failure to furnish complete and accurate information in this regard will lead to the disqualification of a response and may preclude a Respondent from doing future business with Transnet]

- We declare, to the extent that we are aware or become aware of any relationship between ourselves and Transnet [other than any existing and appropriate business relationship with Transnet] which could unfairly advantage our entity in the forthcoming adjudication process, we shall notify Transnet immediately in writing of such circumstances.

BREACH OF LAW

- We further hereby certify that I/we **have/have not been** [delete as applicable] found guilty during the preceding 5 [five] years of a serious breach of law, including but not limited to a breach of the Competition Act, 89 of 1998, by a court of law, tribunal or other administrative body. The type of breach that the Respondent is required to disclose excludes relatively minor offences or misdemeanours, e.g. traffic offences. This includes the imposition of an administrative fine or penalty.

Where found guilty of such a serious breach, please disclose:

NATURE OF BREACH:

DATE OF BREACH: _____

Furthermore, I/we acknowledge that Transnet SOC Ltd reserves the right to exclude any Respondent from the bidding process, should that person or entity have been found guilty of a serious breach of law, tribunal or regulatory obligation.

SIGNED at _____ on this _____ day of _____ 20__

for and on behalf of _____ duly authorised hereto	AS WITNESS:
Name:	Name:
Position:	Position:
Signature:	Signature:
Date:	Registration No of Company/CC _____
Place:	Registration Name of Company/CC _____

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RFQ FOR THE SUPPLY AND DELIVERY OF 60KG FLANGE LUBRICATORS COMPLETE WITH RUBBER INSULATORS

ANNEXURE A: BBEE PREFERENCE POINTS CLAIM FORM

This preference form contains general information and serves as a claim for preference points for Broad-Based Black Economic Empowerment [**B-BBEE**] Status Level of Contribution.

1. INTRODUCTION

- 1.1 A total of 20 preference points shall be awarded for B-BBEE Status Level of Contribution.
- 1.2 Failure on the part of a Bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System [**SANAS**] or a Registered Auditor approved by the Independent Regulatory Board of Auditors [**IRBA**] or an Accounting Officer as contemplated in the Close Corporation Act [**CCA**] together with the bid will be interpreted to mean that preference points for B-BBEE Status Level of Contribution are not claimed.
- 1.3 Transnet reserves the right to require of a Bidder, either before a Bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by Transnet.

2. GENERAL DEFINITIONS

- 2.1 **"all applicable taxes"** include value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 2.3 **"B-BBEE status of contributor"** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 **"Bid"** means a written offer in a prescribed or stipulated form in response to an invitation by Transnet for the provision of goods, works or services;
- 2.5 **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 [Act No. 53 of 2003];
- 2.6 **"comparative price"** means the price after the factors of a non-firm price and all unconditional discounts that can utilised have been taken into consideration;
- 2.7 **"consortium or joint venture"** means an association of persons for the purpose of combining their expertise, property, capital, efforts, skills and knowledge in an activity for the execution of a contract;
- 2.8 **"contract"** means the agreement that results from the acceptance of a bid by Transnet;

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- 2.9 **"EME"** means any enterprise with an annual total revenue of R5 [five] million or less as per the 2007 version of the B-BBEE Codes of Good Practice and means any enterprise with an annual total revenue of R10 [ten] million or less as per the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928;
- 2.10 **"firm price"** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs and excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 **"functionality"** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 **"non-firm prices"** means all prices other than "firm prices";
- 2.13 **"person"** includes reference to a juristic person;
- 2.14 **"QSE"** means any enterprise with an annual total revenue between R5 [five] million and R35 [thirty five] million as per the 2007 version of the B-BBEE Codes of Good Practice and means any enterprise with an annual total revenue of between R10 [ten] million and R50 [fifty] million as per the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928
- 2.15 **"rand value"** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.16 **"subcontract"** means the primary contractor's assigning or leasing or making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.17 **"total revenue"** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Empowerment Act and promulgated in the Government Gazette on 9 February 2007;
- 2.18 **"trust"** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.19 **"trustee"** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The Bidder obtaining the highest number of total points for the evaluation criteria as enumerated in Section 2 of the RFP will be awarded the contract, unless objective criteria justifies the award to another bidder.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.

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- 3.3 Points scored will be rounded off to 2 [two] decimal places.
- 3.4 In the event of equal points scored, the Bid will be awarded to the Bidder scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more Bids have scored equal points including equal preference points for B-BBEE, the successful Bid will be the one scoring the highest score for functionality.
- 3.6 Should two or more Bids be equal in all respect, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

- 4.1 In terms of the Preferential Procurement Regulations, 2011, preference points shall be awarded to a Bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of Points [Maximum 20]
1	20
2	18
3	16
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

- 4.2 Bidders who qualify as EMEs in terms of the 2007 version of the Codes of Good Practice must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EME's with B-BBEE Status Level Certificates.
- 4.3 Bidders who qualify as EMEs in terms of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928 are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R10 million or less and the entity's Level of Black ownership.
- 4.4 In terms of the 2007 version of the Codes of Good Practice, Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 4.5 The Department of Trade and Industry recently revised the Codes of Good Practice on 11 October 2013 [Government Gazette No. 36928]. The Revised Codes will replace the Black Economic Empowerment Codes of Good Practice issued on 9 February 2007. The Revised Codes provide for a transitional period ending 30 April 2015. During the transitional period, companies may elect to be

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measured in terms of the Revised Codes or the 2007 version of the Codes. Companies which are governed by Sector-specific Codes will be measured in terms of those Sector Codes.

- 4.6 As such, Transnet will accept B-BBEE certificates issued based on the Revised Codes. Transnet will also continue to accept B-BBEE certificates issued in terms of the 2007 version of the Codes provided it was issued before 1 May 2015. Thereafter, Transnet will only accept B-BBEE certificates issued based on the Revised Codes.
- 4.7 In terms of the Revised Codes of Good Practice, Bidders who qualify as QSEs must comply with all the elements of B-BBEE for the purposes of measurement. QSEs that are at least 51% or 100% Black owned are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R50 million or less and the entity's Level of Black ownership. Large enterprises must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 4.8 A trust, consortium or joint venture will qualify for points for its B-BBEE status level as a legal entity, provided that the entity submits its B-BBEE status level certificate.
- 4.9 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 4.10 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialised scorecard contained in the B-BBEE Codes of Good Practice.
- 4.11 A person will not be awarded points for B-BBEE status level if it is indicated in the Bid documents that such a Bidder intends subcontracting more than 25% [twenty-five per cent] of the value of the contract to any other enterprise that does not qualify for at least the same number of points that such a Bidder qualifies for, unless the intended subcontractor is an EME that has the capability and ability to execute the subcontract.
- 4.12 A person awarded a contract may not subcontract more than 25% [twenty-five per cent] of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract.
- 4.13 Bidders are to note that in terms of paragraph 2.6 of Statement 000 of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928, any representation made by an entity about its B-BBEE compliance must be supported by suitable evidence or documentation. As such, Transnet reserves the right to request such evidence or documentation from Bidders in order to verify any B-BBEE recognition claimed.

5. B-BBEE STATUS AND SUBCONTRACTING

- 5.1 **Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:**

B-BBEE Status Level of Contributor _____ = _____ [maximum of 20 points]

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Note: Points claimed in respect of this paragraph 5.1 must be in accordance with the table reflected in paragraph 4.1 above and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or a sworn affidavit in the case of an EME or QSE.

5.2 Subcontracting:

Will any portion of the contract be subcontracted? YES/NO [delete which is not applicable]

If YES, indicate:

- (i) What percentage of the contract will be subcontracted?%
- (ii) The name of the subcontractor
- (iii) The B-BBEE status level of the subcontractor
- (iv) Is the subcontractor an EME? YES/NO

5.3 Declaration with regard to Company/Firm

- (i) Name of Company/Firm.....
- (ii) VAT registration number.....
- (iii) Company registration number.....
- (iv) Type of Company / Firm [TICK APPLICABLE BOX]
 - Partnership/Joint Venture/Consortium
 - One person business/sole propriety
 - Close Corporations
 - Company (Pty) Ltd
- (v) Describe Principal Business Activities
.....
.....
.....
- (vi) Company Classification [TICK APPLICABLE BOX]
 - Manufacturer
 - Supplier
 - Professional Service Provider
 - Other Service Providers, e.g Transporter, etc
- (vii) Total number of years the company/firm has been in business.....

BID DECLARATION

I/we, the undersigned, who warrants that he/she is duly authorised to do so on behalf of the company/firm, certify that points claimed, based on the B-BBEE status level of contribution indicated in paragraph 4 above, qualifies the company/firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct.
- (ii) In the event of a contract being awarded as a result of points claimed as shown in

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paragraph 6 above, the contractor may be required to furnish documentary proof to the satisfaction of Transnet that the claims are correct.

- (iii) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, Transnet may, in addition to any other remedy it may have:
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) restrict the Bidder or contractor, its shareholders and directors, and/or associated entities, or only the shareholders and directors who acted in a fraudulent manner, from obtaining business from Transnet for a period not exceeding 10 years, after the *audi alteram partem* [hear the other side] rule has been applied; and/or
 - (e) forward the matter for criminal prosecution.

WITNESSES:

- 1.
- 2.

SIGNATURE OF BIDDER

DATE:.....

COMPANY NAME:.....

ADDRESS:.....

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ANNEXURE B: SCOPE OF WORK

SEE ATTACHED SCOPE OF WORK AS -ANNEXURE B

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Respondent's Signature

Date & Company Stamp

761 HYDRAULIC LUBRICATOR 019 592 2236

The M&S Hydraulic Lubricator was developed as an improved second generation mechanically actuated rail lubricator. This system utilizes the energy of passing train wheels as its means of activation, and the moving parts in the system are dramatically reduced over older mechanical units.

In operation, this system has a Powerblock[™] which is attached to the field side of the rail, and is in effect a piston type fluid pump. This block is connected to a hydraulic motor by fluid output line and a fluid return line. The hydraulic motor is directly coupled to the gear type grease pump.

The pumping unit is mounted in a separate "clean compartment". Thus all work necessary to maintain the equipment is undertaken in a clean compartment.

As train wheels pass over the Powerblock[™] and depress the plunger, hydraulic fluid is forced through the output line to the hydraulic motor, which causes the motor shaft to rotate. In so doing this causes the gear pump to rotate and pump grease which is then dispensed at the rail. The fluid flow from the Powerblock[™] moves on the upstroke of the plunger. This prevents inordinately high pressure build up which could occur on the downstroke under the tremendous force of the passing train wheel. This system normally reaches a high pressure not greater than 70 Bars.

Grease flow to the rail, via the M&S application system is then regulated using a grease line by-pass, which allows only a desired quantity of grease to flow to the rail, with the remainder returning to the grease reservoir. This may be finely adjusted according to local conditions.

A feature that can be easily observed is that after a train has passed over the powerblock[™] plunger, the residual pressure built up in the system causes a further small amount of grease to be dispensed to the rail. This grease will be available to lubricate the flanges of the leading wheels of the next train.

The hydraulic fluid media is readily available automotive transmission fluid. By using this fluid, the system is internally self lubricating, thereby drastically limiting moving parts wear.

The advantages of this system over mechanical drive lubricators are:

- Fewer moving parts - longer service life with fewer breakdowns
- System is internally self lubricating
- Pump and hydraulic motor are mounted in a clean compartment
- There are no grease flow adjustments at or near the rail
- A large grease capacity
- Easy grease filling (no special tools are needed)

2. OPERATING THE SYSTEM

Passing train wheels depress the plunger, which in turn depresses the upper spring and check piston in the PowerblockTM. As the check piston travels down fluid passes through it until it meets the piston stop, at which point no further downward movement can take place. On the return stroke the lower spring then pushes the check piston closed, thereby forcing the hydraulic fluid up and out through the output line to the hydraulic motor. As the fluid causes the motor to rotate, the gear pump shaft, connected to the motor, is rotated and grease is pumped out to the rail through the grease distribution system.

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3. TOOLS FOR INSTALLATION

- 3.1 Medium shifting spanner (150mm long)
- 3.2 Large shifting spanner (300mm long)
- 3.3 Standard screw driver
- 3.4 Hammer (Ball)
- 3.5 Tube Spanner 24mm AF
- 3.6 Flat Spanner 33mm AF
- 3.7 Flat Spanner 32mm AF
- 3.8 Flat Spanner 30mm AF
- 3.9 Flat Spanner 24mm AF (1 5/16")
- 3.10 Flat Spanner 19mm AF
- 3.11 Flat Spanner 18mm AF
- 3.12 Flat Spanner 17mm AF
- 3.13 Flat Spanner 10mm AF
- 3.14 Pipe Wrench
- 3.15 Allen Key Special 8mm AF (supplied with each lubricator)
- 3.16 Allen Key 6mm
- 3.17 Allen Key 2.38 (3/32") (supplied with each lubricator)
- 3.18 Hydraulic Priming Pump T 9-1
- 3.19 Hand Actuating Tool T 9-19
- 3.20 Barring Crank T 9-20
- 3.21 Worn Wheel Go Gauge T 9-21
- 3.22 Wire Brush
- 3.23 Coupler Allen Key 1.76 (3/16")

A shovel or ballast fork and pick to bury tank or move Ballast may be useful.

4. LOCATION SELECTION

The lubricators must always be placed on tangent track, on rails that show no indication of abnormal wear and where the gauge is 1065mm.

On track where there is traffic in both directions, locate the lubricator near the beginning of the curve which is approximately in the centre of the zone to be lubricated.

On track where traffic is in one direction only, locate the lubricator near the first curve to be lubricated.

Do not locate the lubricators at places where there is a heavy loading by locomotives, or close to points and turnouts.

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5. TANK INSTALLATION

Fig. 5-1 & 5-2

5.1 General Note: It is not necessary to install this lubricator tank close to the rail since there is no mechanical linkage. Enough hydraulic and grease hose is supplied to install the tank 2,5m back from the centre line of the track. The system will function as far as 7,5m from the rail.

(Additional hose lengths can be supplied). A 22mm dia hole is provided in the floor of the clean chamber of the tank to allow the tank to be firmly bolted to a suitable foundation using a 20mm bolt. A 2mm thick rubber washer (C3.1) on the tank floor will provide a seal against the ingress of moisture.

(If the tank is not to be bolted through the 22mm hole, make use of the rubber washer (C3.1) and a 25mm x 20mm diameter bolt and nut to plug the hole.)

See Drawing Fig 5.1

5.2 The tank should be installed with the pipe fitting adjacent to the track to be lubricated. (i.e. the lid is to open away from the track to be lubricated). Fig 5.2

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6.1 Refer to Section 4 "Location Selection".

6.2 Space applicator bars approximately 700mm apart (from rail shoe to rail shoe) with the Applicator Bars spaced so that the main grease hose (A.7-0) will lie on or directly adjacent to a sleeper and the branch grease hoses (A.8-0) are not slack.

6.3 Connect branch grease hoses (A.8-0) to the socket (A9-8) of each Applicator Bar (A-0).

6.4 Clean the inside face of the rail head and the top and bottom of the rail base (where the Applicator contacts with the rail) to ensure a proper fit.

6.5 Ensure that the Vertical adjustment screw (A6-4) and horizontal adjustment screws (A6-11) are not tightened.

6.6 Position applicator Bar (A-0) into place and fasten to the rail with the rail shoe. (A-6) Tighten nuts (A6-8), making use of spring washers (A6-9), evenly and tap with a hammer during final wrenching using 24mm tube spanner.

6.7 Once the Bar (A-0) is securely fastened to the rail head, move the Applicator Bar (A-0) by hand against the rail head and check the vertical adjustment by using gauge 3.21. The top of the blade should be 22mm from the top of the rail. If there is head wear, you may want to lower the blade. To lower the blade, remove one, or more U-shims.(A6-3)

6.8 Once the proper height has been set, turn the horizontal adjuster screw (A6-11) in until the top of the blade (A-0) is flush with the rail head, then tighten adjuster screw lock nuts to lock into place. Be sure the horizontal adjuster screw (A6-11) does not back out. It should be firmly pressed up against the blade. Ensure that the foot of the angle is not tilted on the rail shoe (A6-0). (NB) The blade (A-0) must be pushed by hand so that it mates up with the rail - the horizontal screw (A6-11) will hold it in this position, but should not be used to force it against the rail.

6.9 Once horizontal adjustment is set, tighten down vertical adjuster (A6-4)

6.10 Check pins (A3-4) in access hole and nuts on the tube making sure all are tight.

6.11 Pass the worn wheel clearance gauge (Fig. 3.21) over the track to ensure free clearance of wheels under all wear conditions.

6.12 Run the main grease hose (A.7) (to (A8-4) under the track to the grease tank (C-0). Do not connect the hose (A-7) to the tank until the flow of grease to this point is confirmed.

6.13 Strap the main grease hose to the sleeper using Nylon strapping as supplied with original packing.

7. POWERBLOCK (B-0) INSTALLATION (CONT'D)

- 7.1 Choose a clear section of the rail next to the grease container preferably on the low leg of the track, between sleepers, for installation of the Powerblock[™](B-0). Dig out 150mm to 200mm of ballast under the rail.
- 7.2 Connect both the swivel elbows (B2-3) and (B2-6) of the two hydraulic fluid hoses (B-2) to the adaptors (B2-4) and (B2-7) on the Powerblock[™](B-0). (Do not tighten).
- 7.3 Clean the entire fishing area of the rail where the Powerblock[™](B-0) will be installed. Fit the Powerblock[™](B-0) into the fishing of the rail. Hold it in place and push the two rod members on the opposite side of the rail. Slide the yoke over the second ends of the rod and secure with lockwashers and nuts provided. Use the 24mm tube spanner to tap the top of the Powerblock[™] onto the rail, during final tightening.
- 7.4 Using the worn wheel gauge (Fig 3.21) check that the body of the Powerblock[™] is clear of worn wheels.
- 7.5 Secure the two hydraulic hoses (B2-0), (supplied and used in a black protective sheath) to the adaptors on the tank. Tighten the fittings on the Powerblock[™]. (B2-4 & B2-7)
- 7.6 Fill the Reservoir (C7-0) with Calsonic ATF - 1000 (automotive transmission fluid) and prime the system. (Original filling will require approx 5 litres).

8.3.3.3. CHECKING GREASE TANK

Fig 8.1

8.1 Connect the Priming Pump (Fig 3-18) to the quick release connection (C7-7) along side the reservoir (C7-0). Depress the plunger a number of times until there is hydraulic fluid in the hydraulic return line. Top up the reservoir (C7-0) if necessary.

8.2 Ensure that the Grease tank (C-1) is clean and the filter screen (C2-1) is fully secured by the Keep Plate (C2-2). Fill with new, clean grease to just below the return pipe exit.

8.3 Check the system by dismantling the hydraulic motor (C9-1) from the grease pump (C9-36) by removing the four Nylon head screws (C9-8). See tool 3.12 for this.

Carefully bar over the grease pump using tool 3.20 until grease is directed to the Elbow outlet (C8-2) at the tank wall. Once grease is noticed, connect the main grease hose (A7-0) to the adaptor (A7-2) on the tank wall. Continue barbing until grease appears thorough the Applicator Bar (A-0) slots.

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9. ADJUSTING THE GREASE OUTPUT (Fig 9.1)

9.1 Grease output at the rail is adjusted by the by-pass valve (C8-8). This allows the desired amount of grease to flow to the rail with the remainder of the grease dropping back into the grease tank.

9.2 The grease adjustment is set at the factory for minimum output, (ie. the by-pass is open). To set the output, close the by-pass by turning the knob clockwise until each depression of the Powerblock[®] plunger (B1-3) results in an approximate 3mm bead of grease in each Applicator bar (A-0) slot.

The grease output at the rail must be inspected after the passage of at least one train to determine the correct output for each installation.

9.3 If more grease is required at the rail, close the by-pass valve in 6mm turn increments. Inspect the grease output at the Applicator Bars (A-0) at the rail after a train has passed. Likewise, if grease output is greater than necessary, open the by-pass valve (C8-8) in 6mm increments to reduce grease flow to the rail.

9.4 Once the correct setting has been obtained, lock the by-pass valve (C8-8) with the Allen key provided. (Fig 3.17). There should be no need to change this setting except if a different grade of grease is used or if major seasonal changes are experienced. (Temperature may affect the grease consistency).

9.5 Record the setting of the by-pass valve (C8-8) in a log book by referring to the colour range and figures on the dial.

9.6 Check setting (9.5) each time when maintenance inspections are made.

9.7 If the amount of grease flow to the rail does not respond to the setting of the valve (C8-8), the orifice in the valve (C8-8) could be blocked by foreign matter. Refer 11.15.

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This unit was designed to eliminate the majority of moving mechanical parts in the lubricator. There are, however, a few easy maintenance procedures which should be followed to insure a long service life.

- 10.1 Check and refill the Hydraulic Fluid Reservoir with ATF - IIC, Automatic Transmission Fluid each time the lubricator is filled with grease. Since this fluid is the driving agent which pumps the grease, the unit will not function unless the system remains charged with fluid.
- 10.2 Check all external hydraulic connections for fluid leakage. If any is detected, tighten the fittings.
- 10.3 Check that all fixing devices are tight.
- 10.4 Check that no damage has been done to the equipment.
- 10.5 Clean the dry compartment and site of installation.
- 10.6 Record activity in a log book.

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11. TROUBLE SHOOTING PROCEDURES

On arriving at the lubricator site check the overall installation, especially:

11.1 Applicator Bars (A-0) and the Powerblock™(B-0) for damage, or whether they are fitted complete and properly fastened to the rail. (Fig 6 & 7)

Check Applicator Bars (A-0) and Powerblock™(B-0) clearances with the main wheel gauge (3.21) and reset if necessary.

11.2 Check all hydraulic and grease hoses for leaks or damage. If any signs of leaks found retighten the fittings and check again after a train has passed. (All adaptors (A7-2, A7-3, A8-2, B2-4, B2-7, and C9-28) have one end screwed to BSP standard. These ends require PTFE tape when being fitted. The other end - which has a conical seat where it bolts onto the female socket - is Hydraulic and must NOT be fitted with PTFE or any other thread tape).

11.3 Check the level of grease in the tank. Fill if necessary. Check for any signs of grease being contaminated or if any air pockets are visible. If a large amount of air pockets exist check and clean the filter screen. (see section 8.4)

11.4 Check level of hydraulic fluid in the oil reservoir (C7-0) and fill if necessary. Only use ATF - HDC fluid in the reservoir.

11.5 Replace any non standard parts which may have been used during a previous maintenance visit (See parts list - section 15).

11.6 Check Applicator Bar slots (A-0) to see that they have fresh grease showing. (If grease is not showing evenly across the slots refer to Step 12.1)

11.7 If there is no grease at all showing, then check that the breather vent in the reservoir cap (C2-2) is open.

11.8 Check the Powerblock™ plunger (B1-3) is up and free to be depressed by the next wheels. If not, remove the Powerblock™(B-0) from the rail and replace it with another one. (Return it for repair). See Step 12.2.

11.9 Remove the main grease hose (A-7) from the tank. Using the hand plunger actuating tool (3.19) depress the Powerblock™ plunger (B1-3) 10 to 15 times. If no grease appears follow steps 11.10. If grease still does not appear then the problem is likely to be an obstruction in the grease line between the tank and the rail.

11.10 If the obstruction is between Pump (C9-17) and Applicator Bar (A-0), disconnect hose (A-7) and wash out with paraffin and reconnect. Test.

11.11 If the grease still does not flow check and clean the screen (C2-1) in the grease tank and securely replace with keep (C2-2).

11.12 Check the connection to the Plunger of the PowerblockSM(B1-3). Replace the hose (C2-1) and prime the unit. Test with the remaining Tool (3-19).

11.13 Check and repair, if necessary, the PowerblockSM(12-2)

11.14 If there is still no grease being delivered check the motor and pump section (12-1).

11.15 If the flow of grease to the Applicator Bar (A-0) is excessive and the flow cannot be controlled by closing valve (C8-8), the orifice of this valve could be blocked by foreign matter. Remove the valve and wash out then replace and check. If the grease flow is still uncontrollable replace the valve (C8-8).

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12.1.0 RUBBER TUBING AND CONNECTIONS

12.1 Applicator Bar (Fig. 6.0)

12.1.1 Wipe off the excess grease and observe the condition.

12.1.2 If Slots in Blade (A-1) have been closed by flange contact recheck height by application of the worn wheel gauge (3.21) and check rail gauge.

12.1.3 Remove Bar (A-0) and, if possible, repair by filling slots.

12.1.4 If 12.1.3 is not possible, replace the Applicator Bar (A-0) and return the damaged Bar to the workshops for repair.

12.1.5 If necessary move the location of the lubricator to a more suitable location.

12.1.6 If the condition of the Blade is good, but grease has not passed through it at all or not evenly, the Blade is probably blocked internally.

12.1.7 Strip the Applicator Bar (A-0), clean it out, making use of the end holes in the tube and reassemble the Bar. Fit to the rail.

12.2 PowerblockSM (Fig. 7.0)

12.2.1 Secure the Powerblock (B-0) in a vice.

12.2.2 Remove the Lower Keep (B1-8) and all internal components and check. Replace components broken or worn (See Fig 12.2.2 for sleeve B1-2 replacement).

Take all precautions to keep PowerblockSM and components completely clean and free from any impurities.

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When replacing check the piston (B1-9) as to any air pressure (the check piston to relieve air pressure build up in the main cylinder.

12.2.3 Ensure O-Ring (B1-10) is firmly in place and tighten the lower keep (B1-8) using the impact wrench or a hammer.

12.2.4 When the Plunger (B1-3) has to be replaced it is generally advisable to replace the seal sleeve (B1-2) and O-Ring (B1-1) to ensure optimum performance.

12.3 Workshop Repair of Pump and Motor

12.3.1 When the Motor and Pump operation is suspect (see 11.1) check that the coupling (B9-11 to B9-13) between the Pump and Motor is turning freely when activated.

12.3.2 If this coupler does not turn freely, remove the Motor from the Pump by removing the four screws (C9-8).

12.3.3 Determine which Shaft is not free to turn the motor or the pump. Check for any obstructions and remove. If no obstruction can be seen, or the obstruction cannot be removed, replace the offending component (motor or pump) with spare one.

12.2.4 Replace motor (C9-1) on Pump (C9-12) by tightening the four screws (C9-8) alternatively, periodically checking that both shafts are free to turn.

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13. PREPARATION BEFORE REMOVAL OF LUBRICATOR

13.1 General Note:

When the track on which a M&S Model 761 Lubricator is mounted, has to be tamped, the two Applicator Bars (A-0), together with the two branch grease hoses (A-8) and the Powerblock™ (B-0) have to be removed.

13.2 Removal of Powerblock™ (B-0)

13.2.1 Remove one nut (B3-2) and the spring washer (B3-1) from rod (B-3) and loosen the other nut (B3-2) on rod (B-3).

13.2.2 Remove Yoke with (B-4), one rod (B-3) and remove other rod (B-3).

13.2.3 Remove the Powerblock™ from the rail which is still connected to the hydraulic hoses. (A light tap with the hammer may be needed to free the block from the rail). Place the Powerblock™ (B-0) with hoses still connected, safely away from the path of the tamper.

13.2.4 Make use of the opportunity to clean the Powerblock™ and mating rail.

13.3 Method of Removing the Applicator Plates (A-0)

13.3.1 Disconnect the main grease hose (A7-1) from the Adaptor (A7-3) by unscrewing swivel socket (A7-2).

13.3.2 Ensure that the main hose (A7-1) is secured on the sleeper and clear of the path of the tamper.

13.3.3 Unscrew four rod nuts (A6-8) and withdraw Rods (A6-7) from the rail shoes (A6-1).

13.3.4 Remove the freed assembly comprising of:
two Applicator Bars (A-0) (A-1 - A6-12), hose (A-8) and tee (A7-3).

13.3.5 Make use of this removal to clean the components and rail and to remove excess grease which may be present.

13.4 Replacement

13.4.1 Replace and reconnect the Applicator Bars as per Section 6.

13.4.2 Replace and check Powerblock™ as per Section 7.

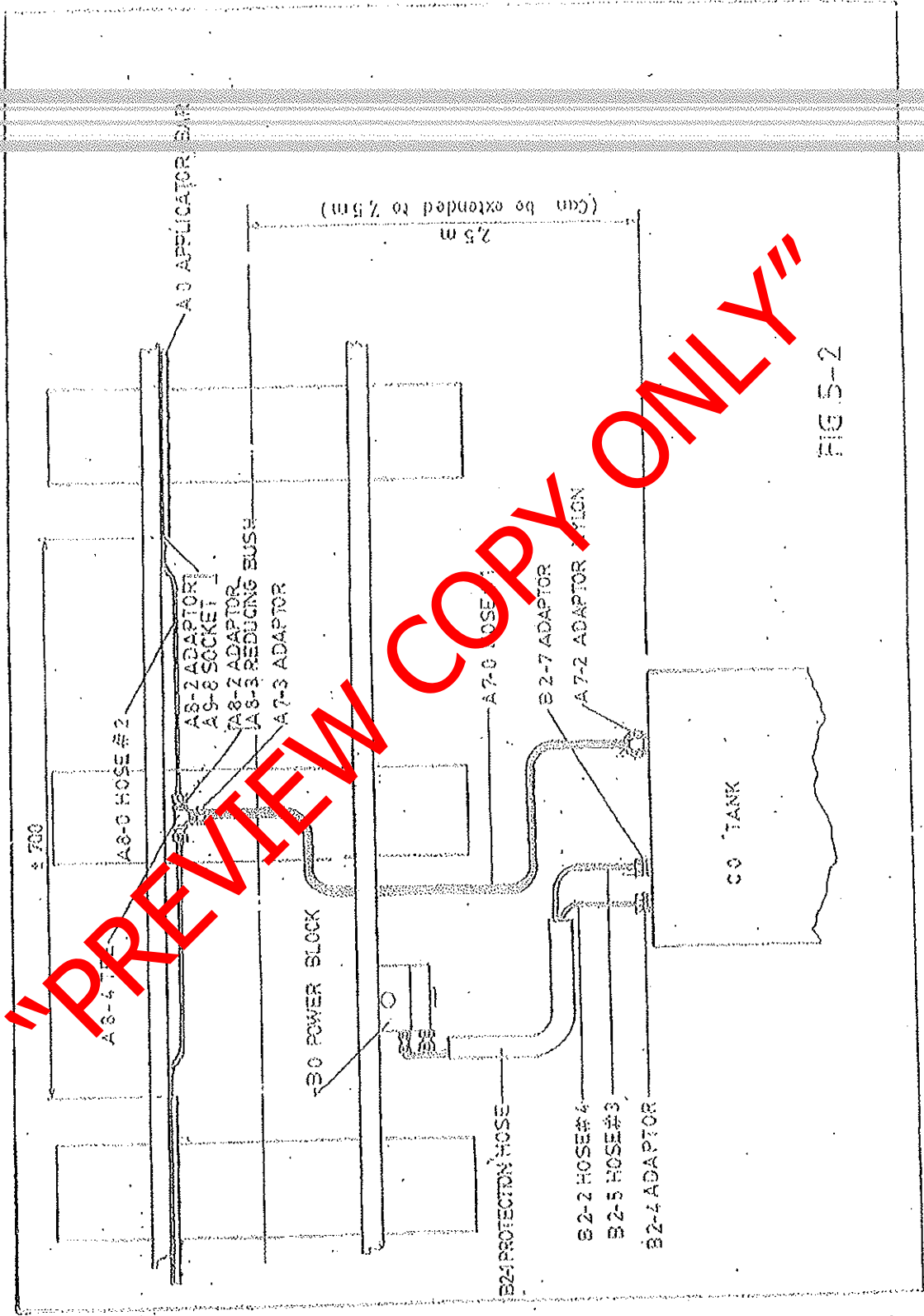
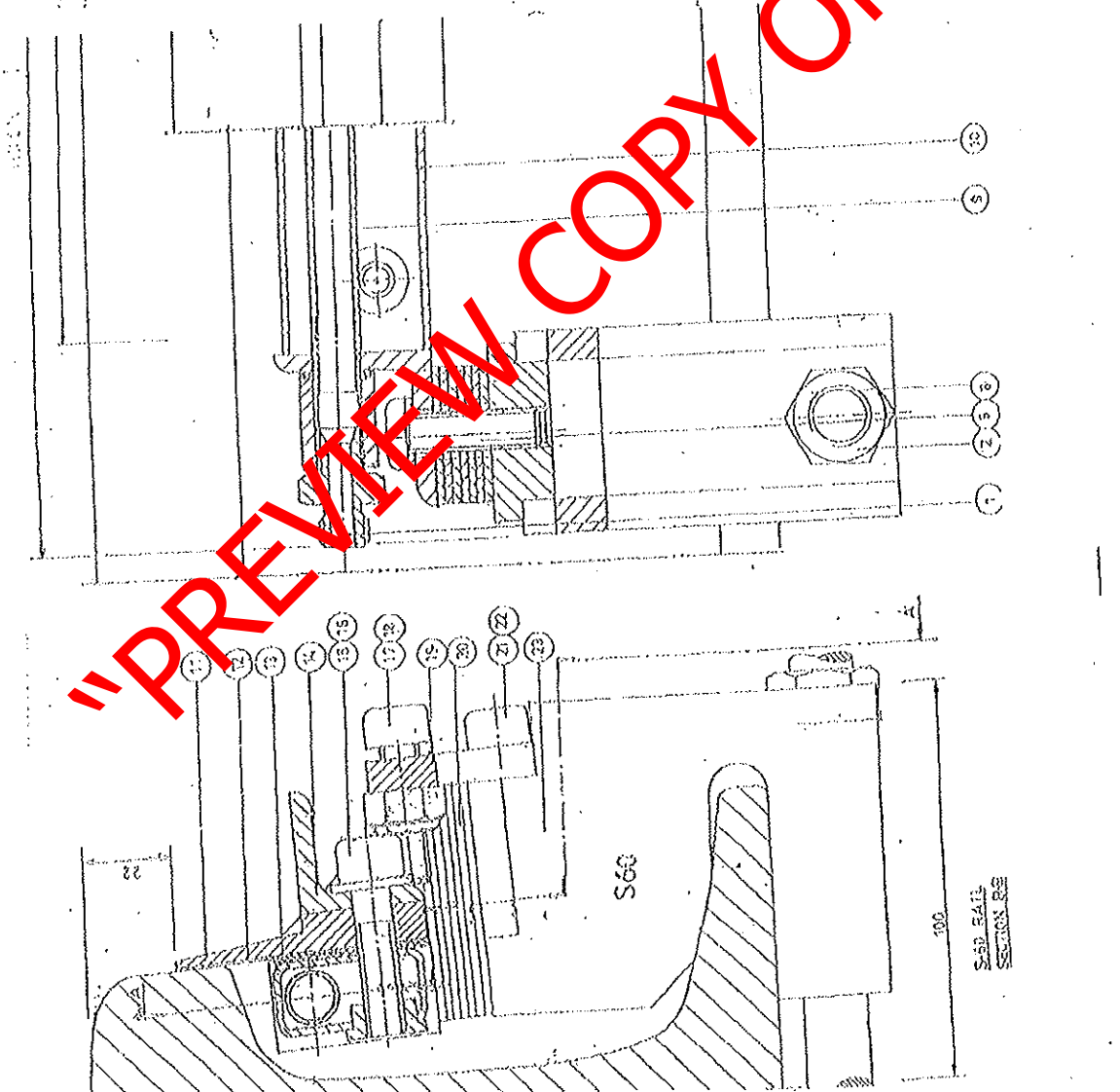


FIG 5-2

28	DS-2	ADAPTOR	1	MS 084
27	DS-30	1/2" RAIL SHOE	2	
26	DS-40	1/4" RAIL SHOE	2	MS 085
25	DS-48	1/2" RAIL SHOE	2	MS 080
24	DS-57	1/2" RAIL SHOE	2	MS
23	DS-60	5/8" RAIL SHOE	2	0 P.D.
22	DS-8	SPRING WASHER	2	1/4" ZN
21	DS-2	CAP SCREW	2	5 MS 073
20	DS-2	U SHIR	14	MS 074
19	DS-1	WRTZ ADJ BAR	1	0
18	DS-1	NYLOC NUT	2	0-45
17	DS-3	CAP SCREW	2	MS 023X10
16	DS-2	RUBBER WASHER	1	1/2" X 1/4"
15	DS-1	CAP SCREW	1	5 MS 075
14	DS-1	CLAMPING ANGLE	1	5 MS 028
13	DS-1	TUBE GASKET	1	6 MS 050
12	DS-1	BACK BLADE SHIM	1	6 MS 025
11	DS-1	DISTRIBUTION BLADE	1	6 MS 052
10	DS-1	TEST TUBE ASSY.	1	6 MS 085
9	DS-1	GREASE FEED PIPE	1	6 MS 021
8	DS-1	APPL. BAR ROD	1	1/2" BLACK OUT
7	DS-5	WASHER	2	1/2" R.D.
6	DS-4	SPRING WASHER	2	1/2" X 3/8"
5	DS-3	BUTTON HD. SCREW	2	1/8" BLACK OUT
4	DS-3	WASHER 1/4"	2	1/16" R.D.
3	DS-2	SPRING WASHER	2	1/16" BLACK
2	DS-4	NUT	2	
1	DS-2	ADAPTOR	1	
MEMBER NO 100 SECTION				



NEOLOVAN CO
 RAIL FLANGE INDICATOR
 APPLICATOR BAR ASSEMBLY

DRAWN DATE DRAWN BY
 M LUCAS 12-19-99 NG-1 3-99

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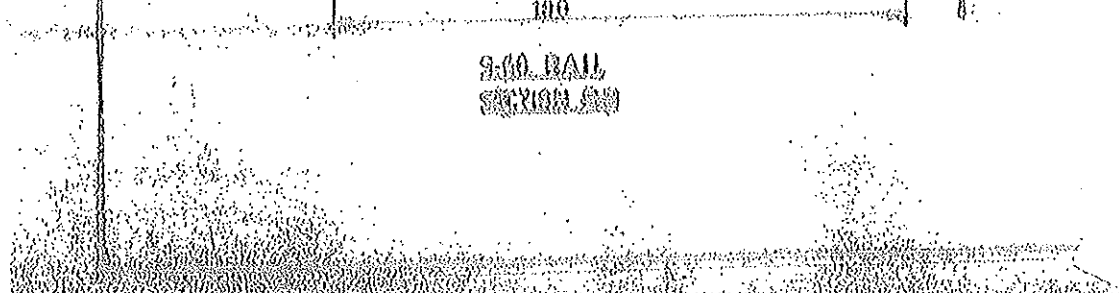
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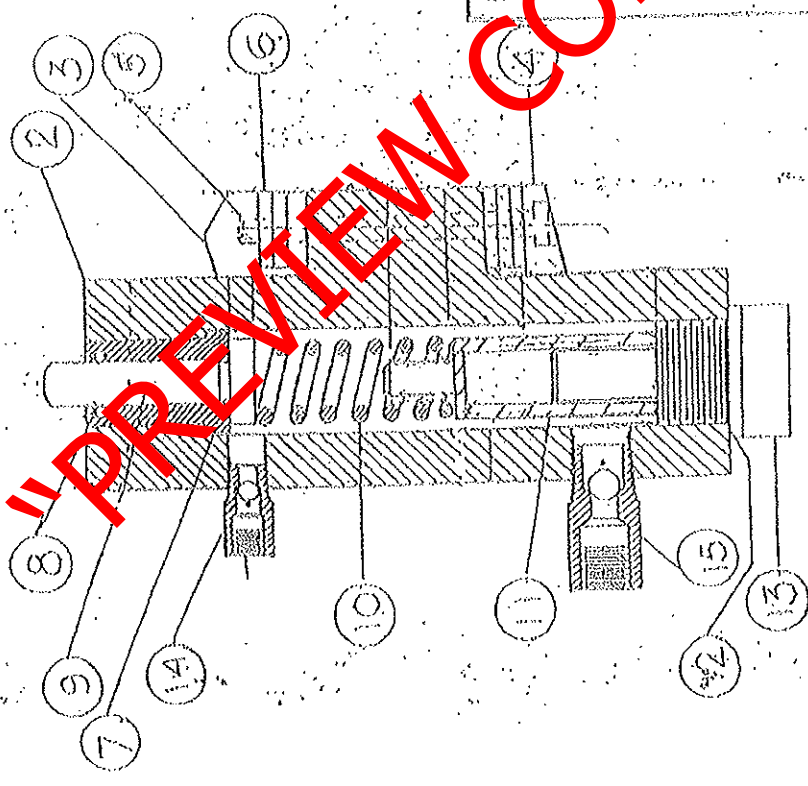
S60

100

S60 BALL
SECTION A-A



ITEM	PAN.	DESC.	NO.	ASS.
15	B1-11	VALVE LP.	1	1
14	B1-9	VALVE HP.	1	1
13	B1-8	KEEP, LOWER	1	1
12	B1-10	O-RING, LOWER	1	1
11	B1-6A	SPACER	1	1
10	B1-4A	SPRING(S) PLUNGER	1	1
9	B1-5	FLUNGER	1	1
8	B1-1	O-RING, CRUSH	1	1
7	B1-2	SLEEVE UPPER	1	1
6	B1-15	SHIMS, PACK	6	6
5	B1-14	SCREWS	2	2
4	B1-13	INSERT, LOWER	1	1
3	B1-2	INSERT, UPPER	1	1
2		BODY	1	1
1	B00-A	ASSEMBLY	1	1



THE NGOLOVAN CO.

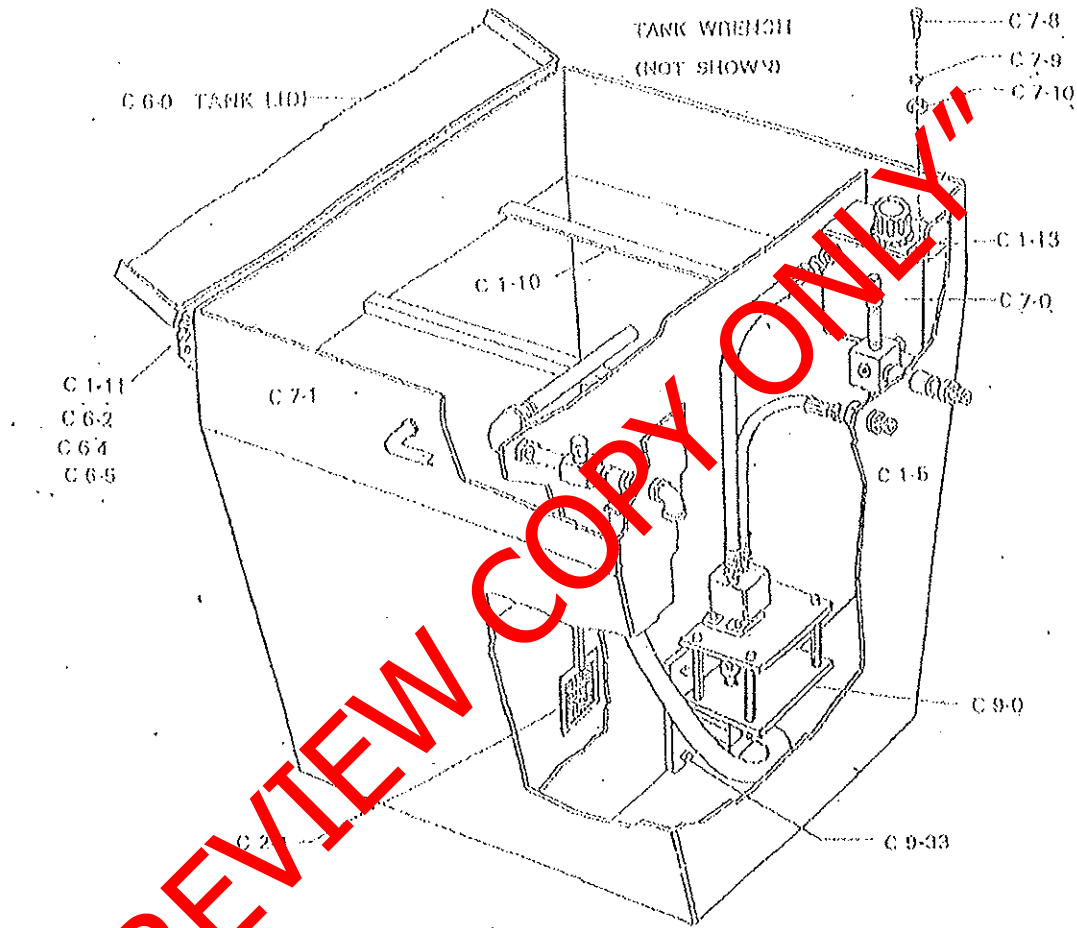
MOORE & STEELE CORPORATION

S 60 RAIL LUBRICATOR
 0-0-0A

DRAWN	DATE	DRAWING NUMBER
<i>[Signature]</i>	21-2-02	NG-MS-120

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TANK UNIT COMPLETE
PART No. C-9



- Not Shown:
- | | |
|--------------------------|---------------------|
| C 1-9 Wrench Holder | C 5-1 Wrench (Tank) |
| C 1-9 Nuts | C 6-3 Staple |
| C 2-2 Keep | C 1-12 Hasp Lid |
| C 3-1 Nonpressure Washer | C 1-14 Slide |
| C 4-1 Allen Key | |

FIG. 5-0

PUMP/MOTOR ASSEMBLY COMPLETE

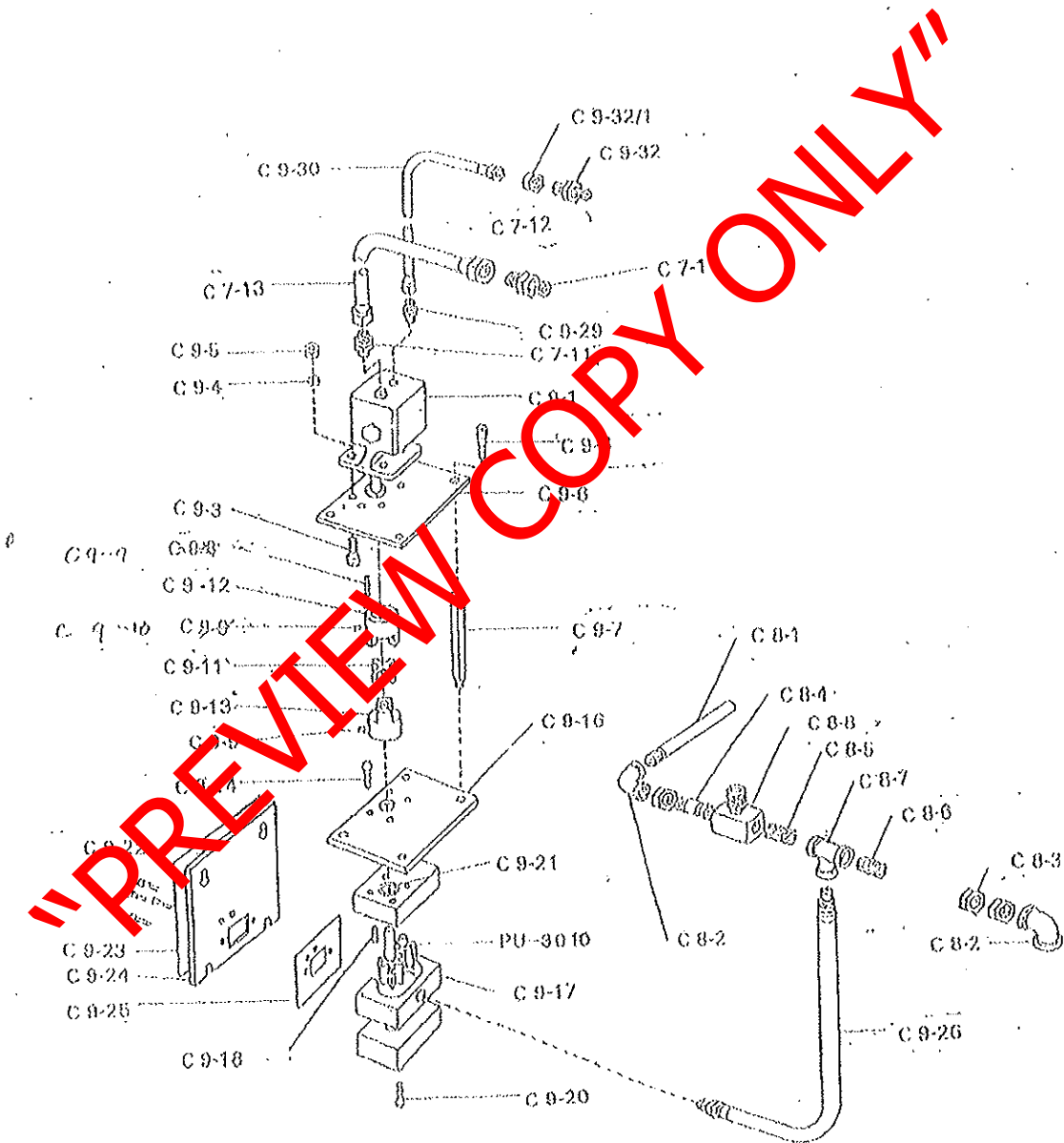


FIG. 9-1

RESERVOIR ASSEMBLY COMPLETE

PART No. C 7-0

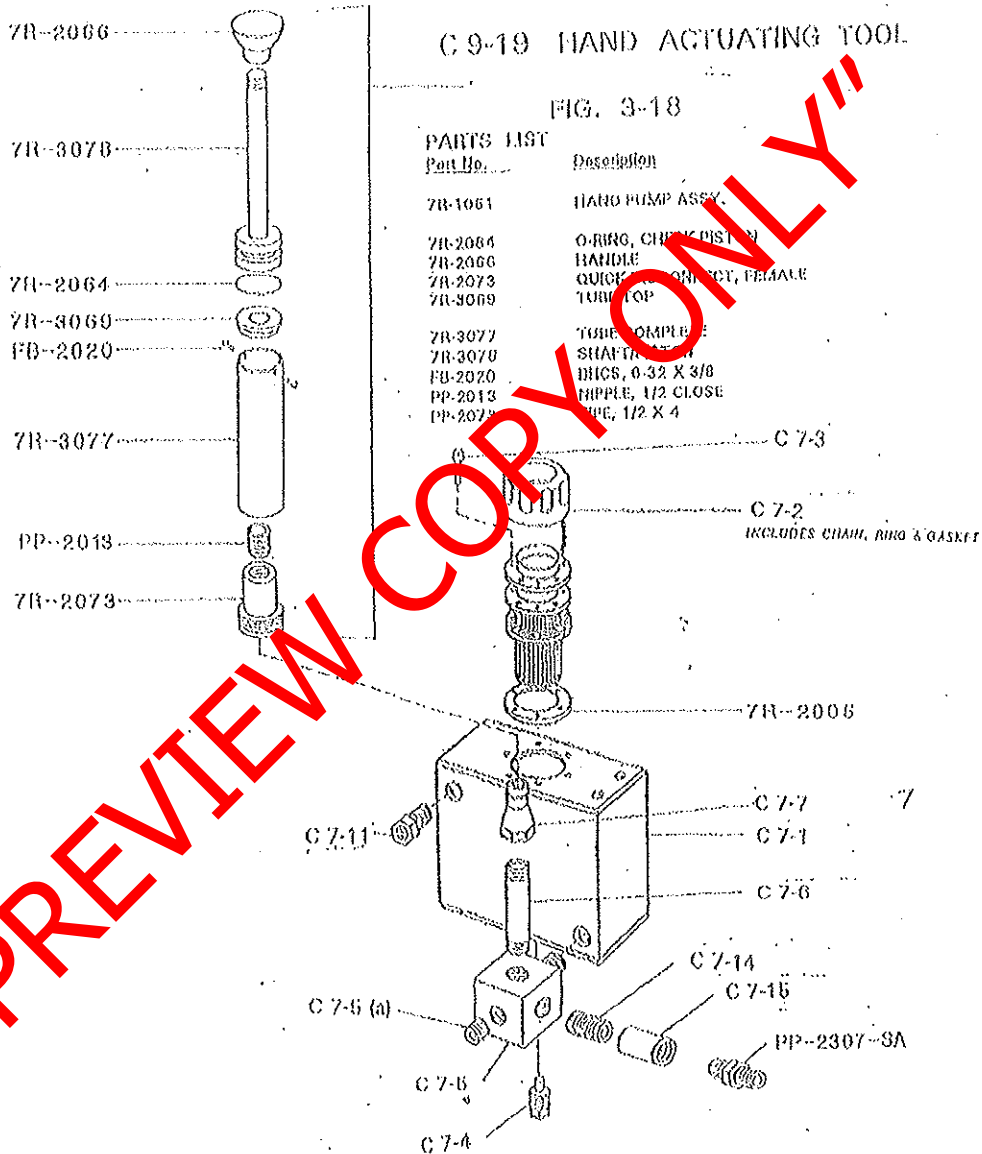


FIG. 8-1