



## ***RK15***

**REEL KLEEN RK15**

**INSTALLATION, OPERATING AND MAINTENANCE MANUAL**

**PLEASE LEAVE WITH OPERATOR**

**A34/074 R1**

**ECN 8662 SEPTEMBER 2017**

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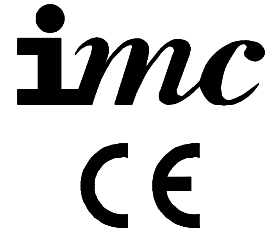
## EC DECLARATION OF CONFORMITY

### EC DECLARATION OF CONFORMITY

(Guarantee of Production Quality)

We, Imperial Machine Company Limited of:  
Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, LL13  
9RF

Declare under our sole responsibility that the machine



### REEL KLEEN RK15

As described in the attached technical documentation is in conformity with the Machine Safety Directive 89/392/EEC as amended by 91/368/EEC and 93/44/EEC and is manufactured under a quality system BS EN ISO 9001. It is also in conformity with the protection requirements of the Electro Magnetic Compatibility Directive 89/336/EEC and is manufactured in accordance with harmonised standards EN 55014-1 Emission and EN 55014-2 Immunity (plus product specific standards).

Approved by E Plumb, Engineering Manager

A handwritten signature in black ink, appearing to read 'E Plumb', is written over a light grey background.

Signed at Wrexham, Date

September 2017

## GUARANTEE

This equipment is guaranteed by IMC for 1 year from the date of its purchase from IMC, or from one of its stockists, dealers or distributors. The guarantee is limited to the replacement of faulty parts or products and excludes any consequential loss or expense incurred by purchasers. Defects that arise from faulty installation, inadequate maintenance, incorrect use or fair wear and tear are not covered by the guarantee.

The guarantee applies in this form to installations within the United Kingdom.

## WATER SUPPLY

**NOTE:** These units are designed to be fitted to a mains water supply in accordance to local water board regulations. This applies to UK installations; overseas customers should install the machine in accordance with local regulations.

**IF IN DOUBT, CHECK WITH YOUR LOCAL AUTHORITY**

## COMMISSIONING

These instructions are designed to aid you in the installation of the REEL KLEEN.

1. All REEL KLEEN's come with hose, they are set at the proper tension and are ready for wall mounting.
2. The REEL KLEEN can also be mounted from the floor or ceiling.
3. When floor or ceiling mounted, the hose guide should be adjusted to allow the hose to be pulled from the REEL KLEEN in a straight line for maximum hose life.
4. A 3/4" BSP flexible connection is supplied for connection to the water inlet.
5. Connect water supply line and tighten with a spanner.
6. Turn on water supply and check for leaks.

## MAINTENANCE

Other than regular cleaning the REEL KLEEN's require no maintenance by the end user.

## MATERIAL CONTENT

The REEL KLEEN contains the following materials:

|                     |   |
|---------------------|---|
| Metals              | Stainless steel, Mild steel (inc plated). |
| Plastics and rubber | Neoprene rubber.                          |

## SAFETY

Please read this manual carefully and follow the instruction. This manual contains important information concerning the operating features of the REEL KLEEN RK15, as well as safety precautions to be taken before, during and after installation. The following safety precautions call attention to potentially dangerous conditions.



**Warning:** Indicates a situation in which personal injury may occur.



**Caution:** Indicates a situation in which damage to equipment or material may occur.

**Note:** Provides helpful information for proper installation and operation of the hose reel.

## GENERAL INSTRUCTIONS

These suggestions are designed to aid you in the installation. Please read them carefully for proper installation, which will ensure that the products will give long and dependable service, with a minimum of maintenance.

1. Shut off water supply at main source and open faucets to drain lines.
2. **Do not** wipe grease off parts.
3. Hand-tighten first before using wrench.
4. Handle plated surfaces with care, being careful not to scratch with tools.
5. Do not force parts together. Tighten according to directions.
6. Rest fixtures on pads whenever necessary, and use wooden blocks and boards to brace them in position.

Use this manual for installation and ordering parts from your dealer (please see final page of this manual for details).

## INSTALLATION



**Caution:** Instruct operators in the safe, proper use and maintenance of the hose reel. Keep this manual for future reference.



**Warning:** Failure to read, understand and follow these instructions may result in personal injury or even fatality.

### A. Mounting:

Reels shipped with hose are ready for installation.

1. Mount hose reel with the main shaft (item 25 – see parts list on page 16) in the horizontal position.
2. Mount reel with centre line of drum (8) in line with hose pay-out.

### B. Supply hose:

Assemble input hose into main shaft (25). Do not use rigid pipe at input connection.

### C. Secondary support cable:



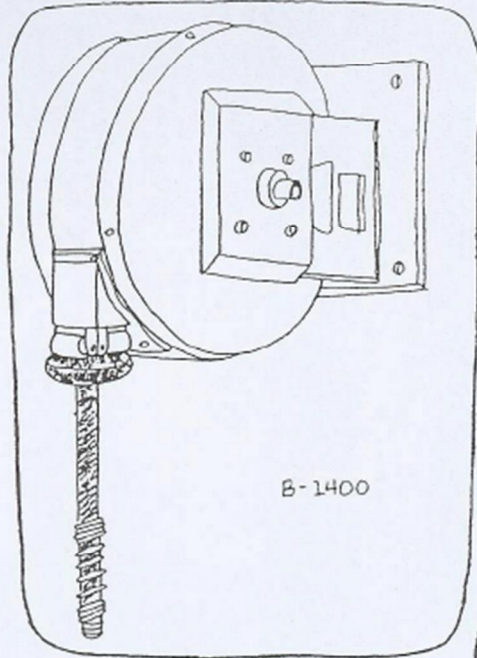
**Warning:** The secondary chain must be used to protect personnel in case of failure of mounting components or support structure.

1. Attach one end of secondary support cable to the hole in the stand cover (20).
2. Attach the other end of secondary support cable to a separate support. Do not attach the secondary support cable to the same structure that supports the hose reel.

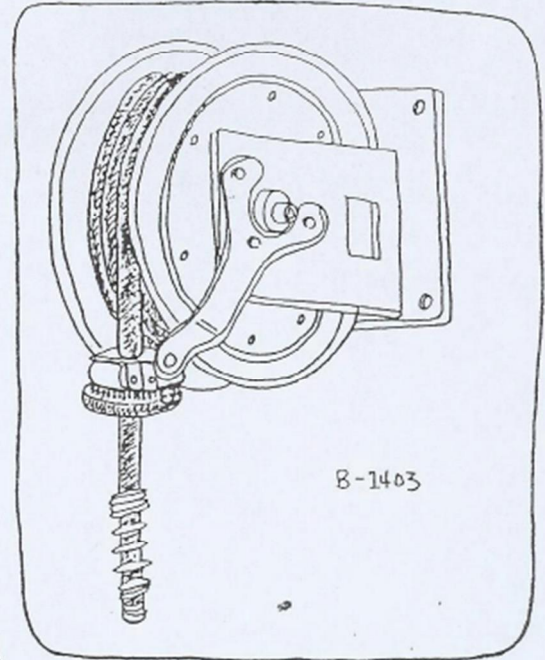
**Note:** Make the cable as short as possible so that the hose reel will drop no more than six inches if the main support fails.

## ASSEMBLY INSTRUCTIONS

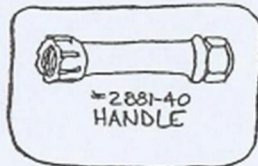
PARTS TO BE ASSEMBLED FOR THE B-1400 AND B-1403 REEL KLEEN  
RETRACTABLE HOSE REEL AND SPRAY



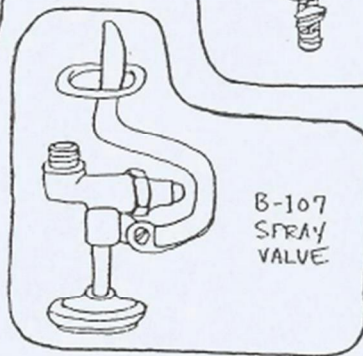
B-1400



B-1403



2881-40  
HANDLE

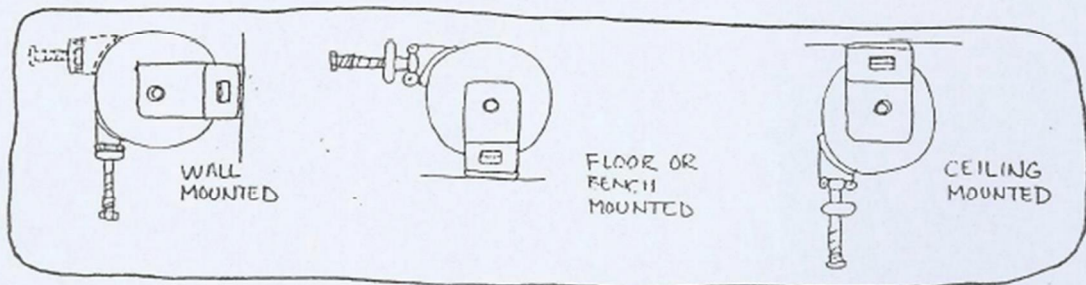


B-107  
SPRAY  
VALVE

### INSTALLATION:

#### ① PRELIMINARY NOTES:

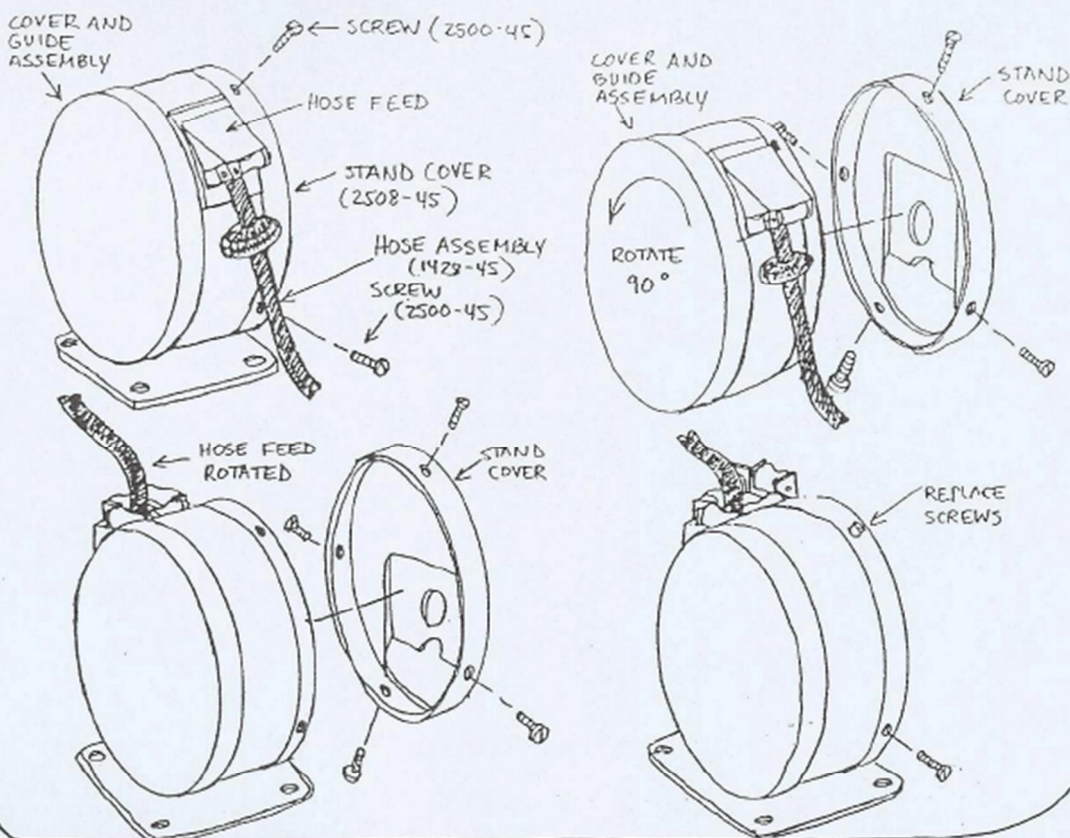
- Ⓐ ALL REELS COME COMPLETE WITH HOSE. THEY ARE SET AT PROPER TENSION AND ARE READY FOR WALL MOUNTING.
- Ⓑ THE REEL CAN ALSO BE MOUNTED ON THE FLOOR OR CEILING.



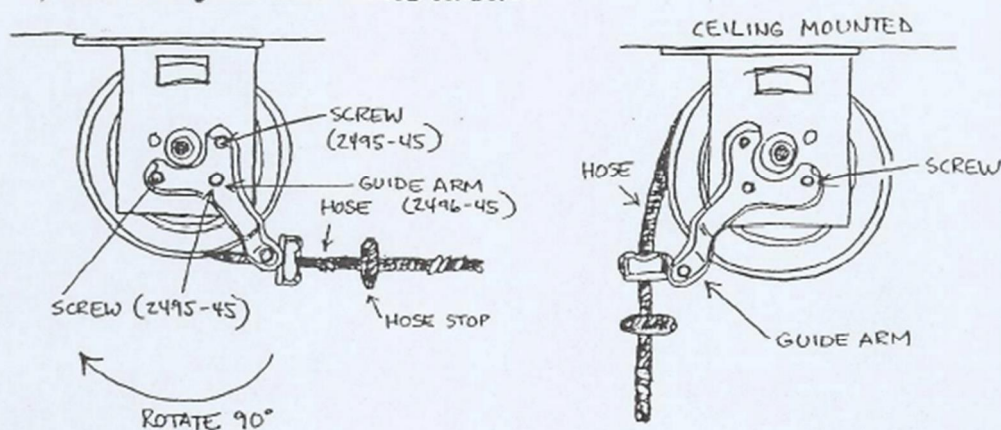


© WHEN FLOOR OR CEILING MOUNTED, THE HOSE GUIDE SHOULD BE ADJUSTED TO ALLOW THE HOSE TO BE PULLED FROM REEL IN A STRAIGHT LINE FOR MAXIMUM HOSE SERVICE LIFE.

- B-1400 - REMOVE FOUR SCREWS (2500-45) FROM COVER, AND ROTATE COVER AND GUIDE ASSEMBLY (2466-45) 90°; REPLACE FOUR SCREWS.



- B-1403 - REMOVE THREE SCREWS (2495-45). ROTATE GUIDE ARM (2496-45) 90° AND REFASTEN WITH THREE SCREWS.

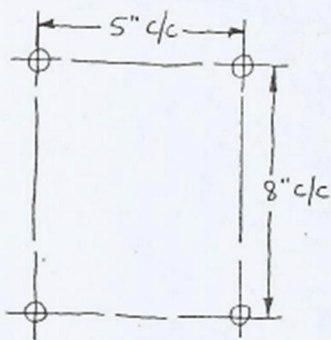


① SUPPLY INLET IS  $\frac{3}{8}$ " IPS INTO MAIN SHAFT. A FLEXIBLE CONNECTION IS SUGGESTED (FURNISHED BY OTHERS) RATHER THAN RIGID PIPE, TO BE USED AT INLET.

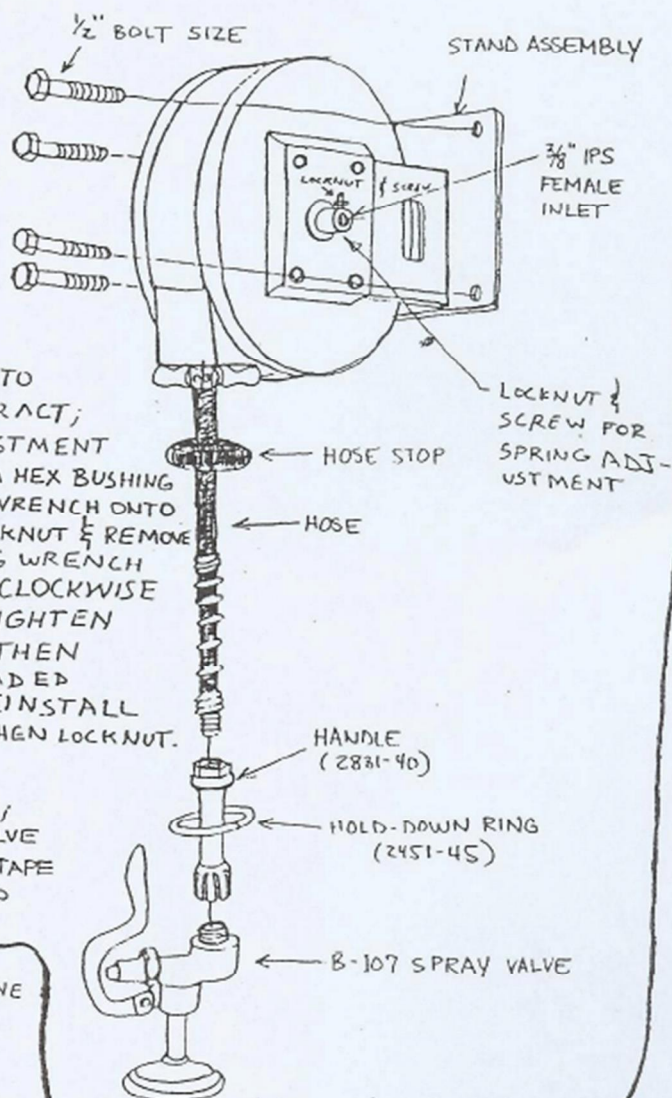
② B-1400 - ALLOW SUFFICIENT SPACE TO REMOVE COVER FOR SERVICING.

③ SHUT OFF WATER SUPPLY

③ IN INSTALLATION SITE, DRILL 4 HOLES,  $\frac{9}{16}$ " DIAMETER IN RECTANGULAR SCHEME AS SHOWN BELOW:



④ HAVE FOUR  $\frac{1}{2}$ " BOLTS READY; ALIGN STAND ASSEMBLY BOLT HOLES WITH DRILLED HOLES, AND BOLT REEL KLEEN IN PLACE; WRENCH TIGHTEN.

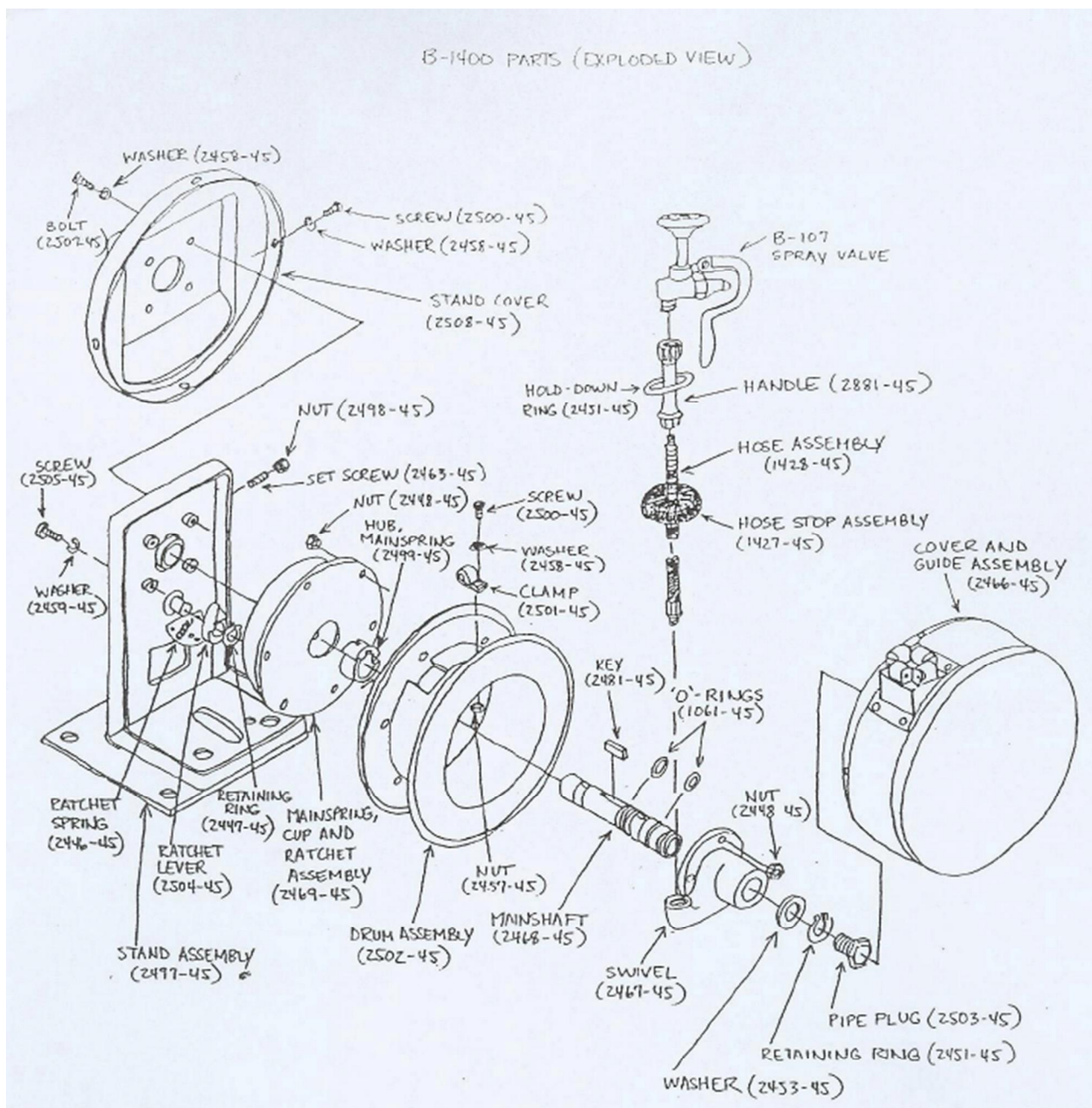


**NOTE** IF HOSE IS HANGING TO LOW OR WILL NOT RETRACT; THE FOLLOWING ADJUSTMENT SHOULD BE MADE SCREW A HEX BUSHING INTO THE INLET; LOCK A WRENCH ONTO THE BUSHING, LOOSEN LOCKNUT & REMOVE SCREW WHILE HOLDING WRENCH STEADY, TURN SHAFT CLOCKWISE SEVERAL TURNS TO TIGHTEN RETRACTOR SPRING THEN REALINE THE THREADED HOLE IN THE SHAFT, REINSTALL SCREW AND TIGHTEN THEN LOCKNUT.

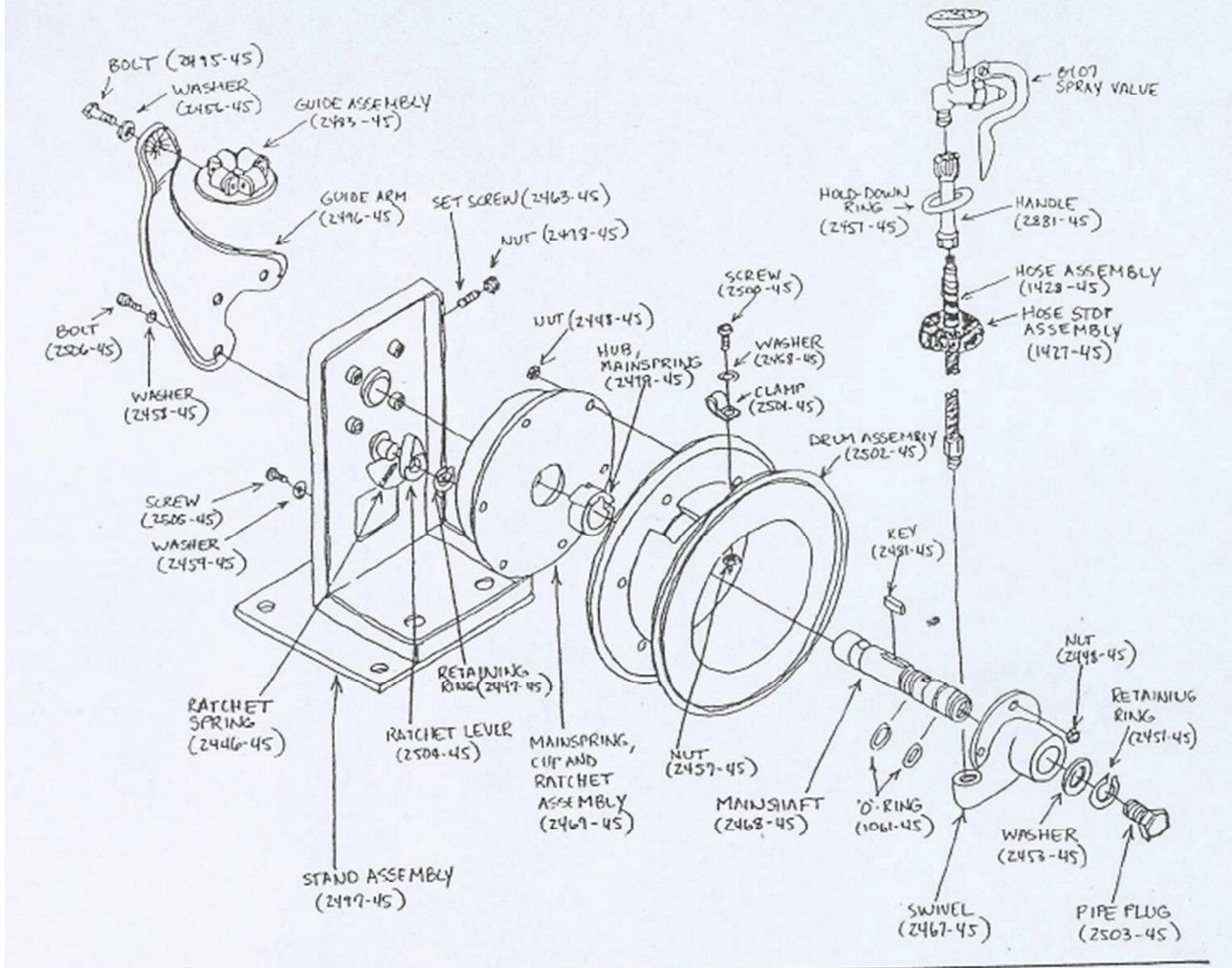
⑤ SCREW HANDLE (WITH HOLD DOWN RING) TO END OF HOSE; THEN SCREW B-107 SPRAY VALVE TO HANDLE. APPLY TEFLON TAPE OR PIPE JOINT COMPOUND TO THREAD OF SUPPLY LINE.

⑥ CONNECT WATER SUPPLY LINE TO REEL KLEEN; WRENCH TIGHTEN.

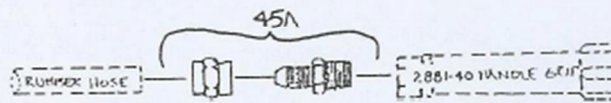
⑦ CHECK FOR LEAKS



B-1403 (EXPLODED VIEW)

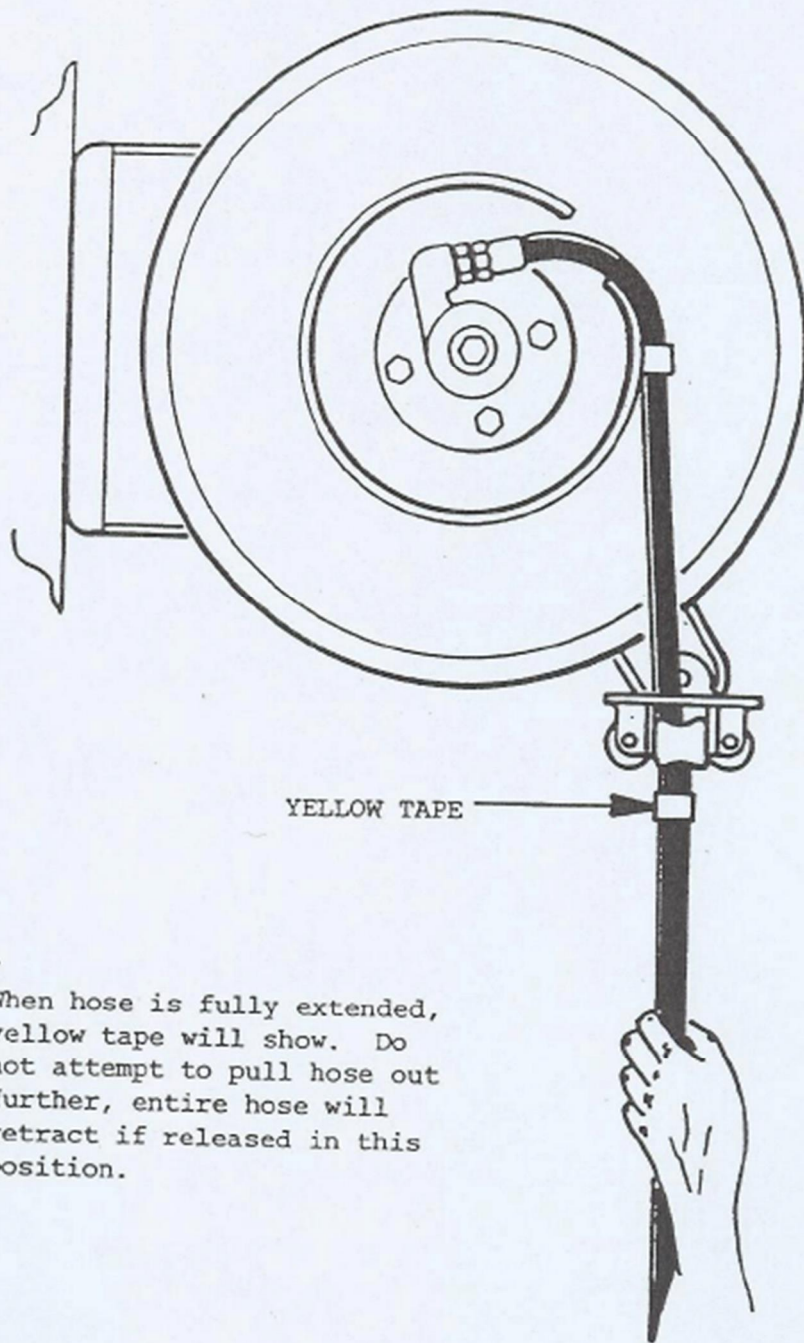


EASY METHOD OF REPAIRING BROKEN REEL-KLEEN HOSE



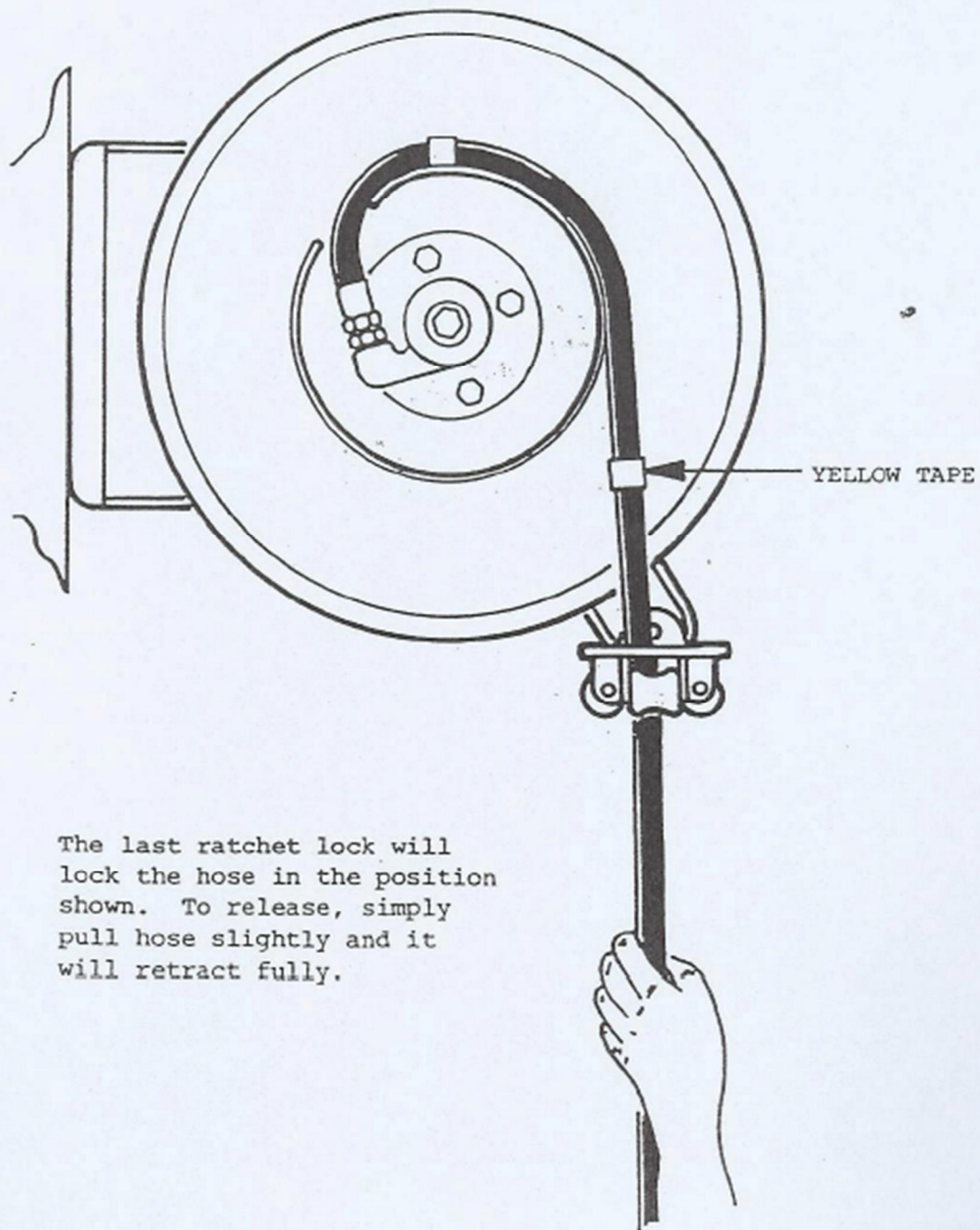
- 1) CUT BROKEN HOSE SQUARELY.
- 2) UNSCREW 45A COUPLING & INSERT END OF HOSE ALL THE WAY TO SHOULDER IN FEMALE PART.
- 3) START SMALL END OF NIPPLE INTO THREAD OF FEMALE PART.
- 4) USING TWO WRENCHES, SCREW THE TWO PARTS OF COUPLING TOGETHER TILL THEY TIGHTEN.
- 5) ATTACH THE MALE THREAD OF NIPPLE TO SA HANDLE GRIP SECURELY USING TEFLON TAPE OR COMPOUND.

ILLUSTRATION # 1  
REEL KLEEN # BI400 & BI403



## ILLUSTRATION # 2

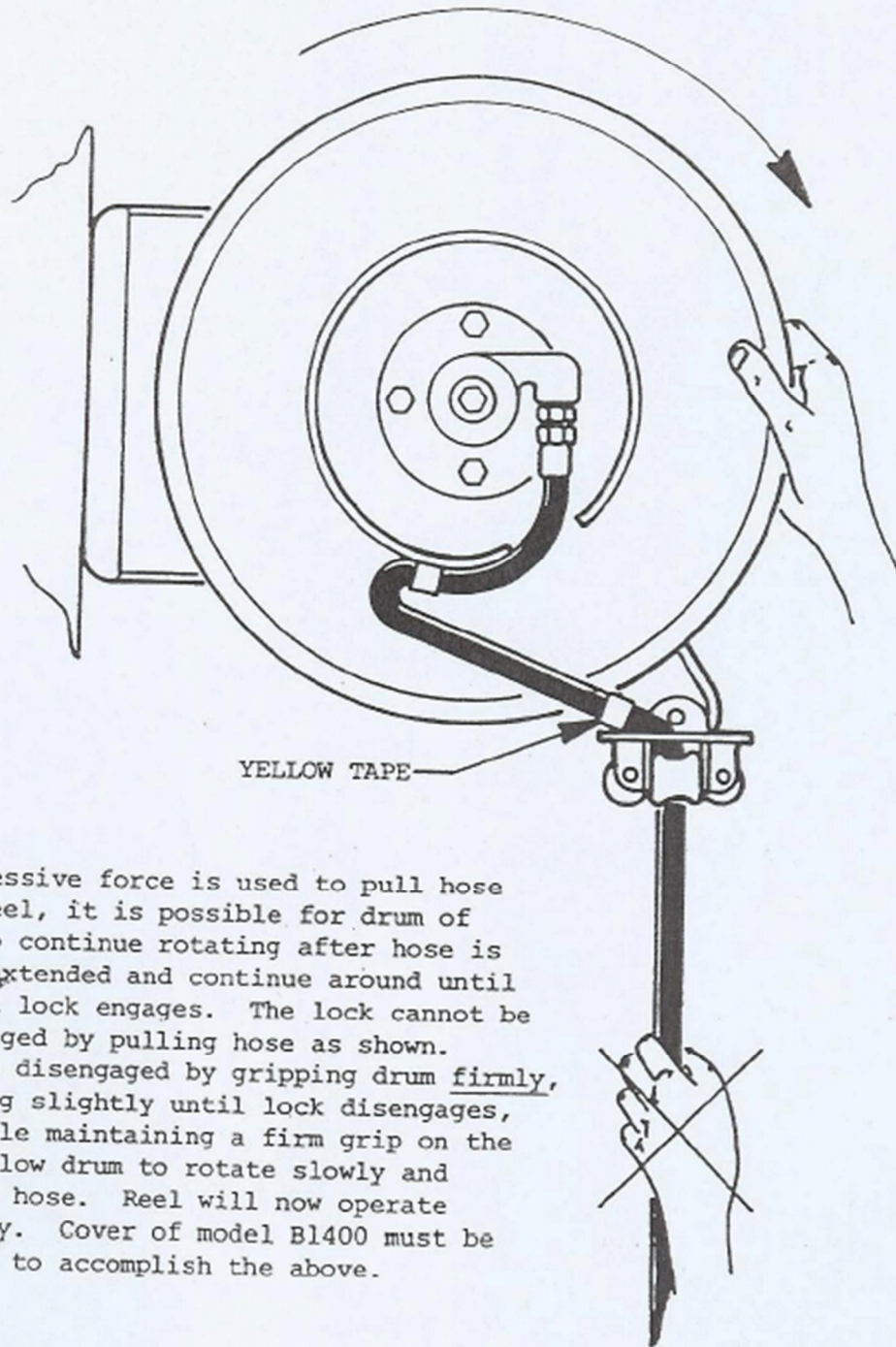
REEL KLEEN # BI400 & BI403



The last ratchet lock will lock the hose in the position shown. To release, simply pull hose slightly and it will retract fully.

### ILLUSTRATION # 3

#### REEL KLEEN # B1400 & B1403



If excessive force is used to pull hose from reel, it is possible for drum of reel to continue rotating after hose is fully extended and continue around until ratchet lock engages. The lock cannot be disengaged by pulling hose as shown. Lock is disengaged by gripping drum firmly, rotating slightly until lock disengages, and while maintaining a firm grip on the hose allow drum to rotate slowly and retract hose. Reel will now operate properly. Cover of model B1400 must be removed to accomplish the above.

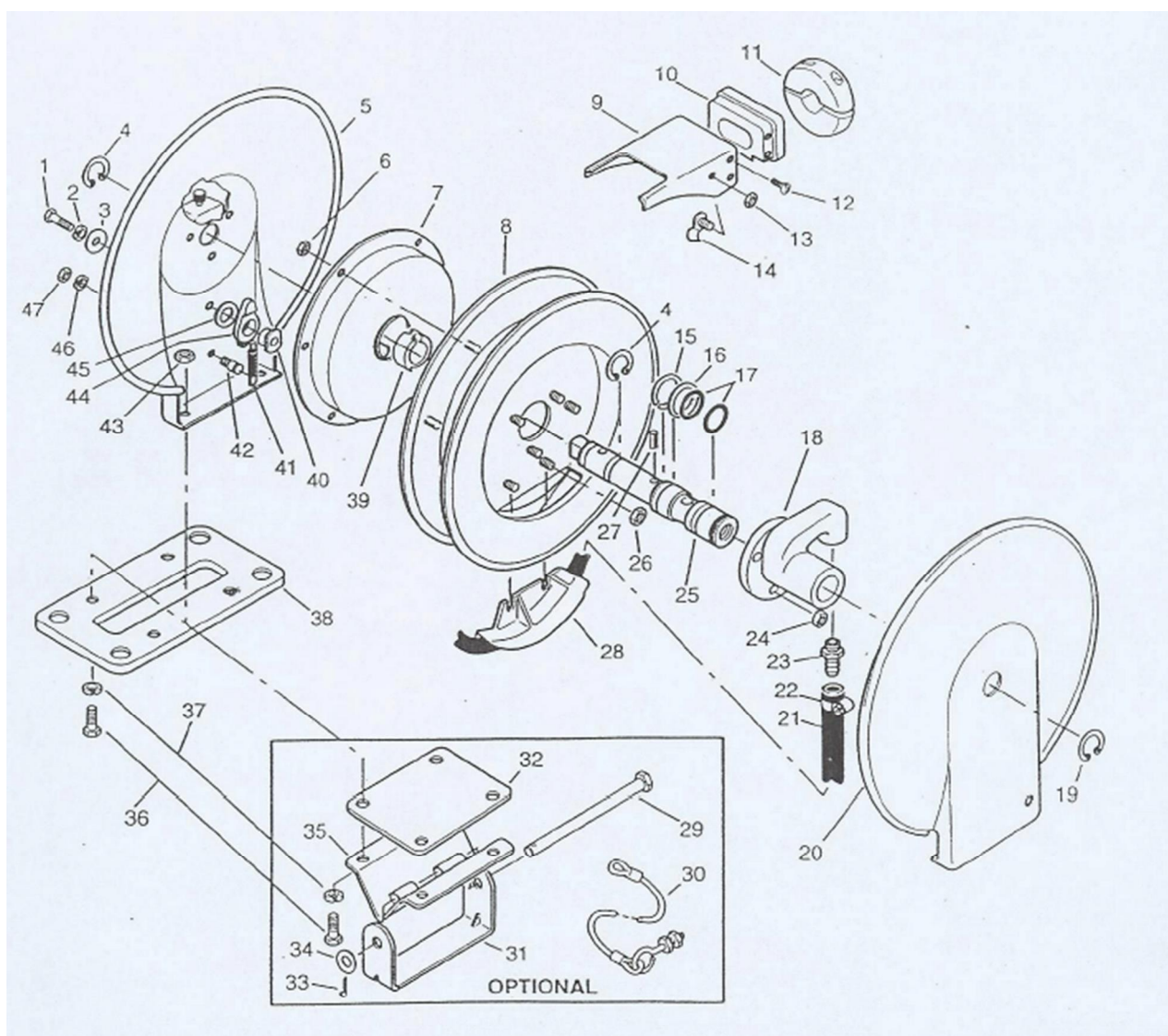
## PARTS LIST

| Item Number | Part Number | Qty. | Description  |
|-------------|-------------|------|--|
| 1           | 30-P-115    | 1    | SCREW (1/4-20 x 1/2")  |
| 2           | 101-P-30    | 1    | LOCK WASHER (1/4")   |
| 3           | 126-P-50    | 1    | WASHER (1/4")  |
| 4           | 580-P-45    | 1    | RETAINING RING   |
| 5           | 57844       | 1    | COVER ASSEMBLY   |
| 6           | 106-P-77    | 6    | LOCK NUT (10-24)   |
| 7           | 57846-2     | 1    | RATCHET & SPRING ASSMBLY D513, D522, DB504                     |
|             | 57846-3     |      | RATCHET & SPRING ASSMBLY DB508                                 |
| 8           | 57827       | 1    | DRUM ASSEMBLY  |
| 9           | 57812       | 1    | GUIDE, CANOPY  |
| 10          | 57814       | 1    | NOSE, GUIDE  |
| 11          | ST-1        | 1    | HOSE STOP (53732)  |
| 12          | 1137-P-62   | 4    | SCREW (#6-32 x 5/16, SELF TAP)                                 |
| 13          | 160-P-77    | 2    | LOCK NUT (10-24)   |
| 14          | 57855       | 2    | CLAMP ASSEMBLY   |
| 15          | 576-P-46    | 1    | RETAINING RING   |
| 16          | 43010       | 1    | WASHER   |
| 17          | C47040142   | 2    | O-RING   |
| 18          | M72420031   | 1    | SWIVEL   |
| 19          | 576-P-46    | 1    | RETAINING RING   |
| 20          | 57803       | 1    | COVER, STAND   |
| 21          | 53821-27    | 1    | HOSE ASSEMBLY (D513)   |
|             | 57883-1     | 1    | HOSE ASSEMBLY (D522)   |
|             | 53821-26    | 1    | HOSE ASSEMBLY (DB504, DB508)                                   |
| 22          | 671-P-10    | 1    | HOSE CLAMP   |
| 23          | 658-P-49    |      | BARB FITTING D522A, D522SA, D522GCA, D522HEA                   |
|             | 658-P-35    |      | BARB FITTING D513A, D504A, DB508A, D513-SA, DB504-SA, DB508-SA |
| 24          | 160-P-50    | 4    | LOCK NUT (10-24)   |
| 25          | M37700002   | 1    | MAIN SHAFT   |
| 26          | 160-P-77    | 2    | LOCK NUT (10-24)   |
| 27          | 230-P-103   | 1    | SELF-LOCK PIN  |
| 28          | 57823       | 1    | GUIDE  |
| 29          | 2006        | 1    | PIN, MOUNTING BRACKET  |



REEL KLEEN RK15

|      |          |   |                          |
|------|----------|---|--------------------------|
| 30   | 62388    | 1 | CABLE, SAFETY (OPTIONAL) |
| 31   | 2009     | 1 | MOUNTING BRACKET         |
| 32   | 57877    | 1 | PLATE, SWIVEL            |
| 33   | 228-P-10 | 1 | COTTER PIN               |
| 34   | 30365    | 1 | WASHER                   |
| 35   | 57808    | 1 | SWIVEL                   |
| 36   | 30-P-115 | 4 | SCREW (1/4-20 x 1/2")    |
| 37   | 101-P-30 | 4 | LOCK WASHER (1/4")       |
| 38   | 57807    | 1 | BASE PLATE               |
| 39   | 14058-2  | 1 | HUB, SPRING RELEASE      |
| 40   | 57843    | 1 | SHAFT LEVER              |
| 41   | 57727    | 1 | SPRING, RATCHET          |
| 42   | 57850    | 1 | PIN, SPRING              |
| 43   | 151-P-20 | 4 | NUT (1/4-20 HEX HEAD)    |
| 44   | 57841    | 1 | LEVER, RATCHET           |
| 45   | 47378    | 1 | WASHER                   |
| 46   | 103-P-20 | 1 | LOCK WASHER (#6)         |
| 47   | 151-P-15 | 1 | NUT (#6-32)              |
| OPT. | 57972    | 1 | SWING MOUNT              |



## SERVICE



**Caution:** Before attempting any service, always cut off supply input and remove all mainspring tension.

### A. Hose replacement:

1. Remove screws (item 36 – see parts list on page 17), washers (37) and nuts (43) from base or swivel plate (38 or 32).
2. Remove retaining ring (19) and canopy guide (9).
3. Remove stand cover (20) exposing swivel (18).
4. Loosen clamp (22).
5. Remove old hose (21) from barb fitting (23).
6. Install new hose.
7. Reassemble by reversing above procedure.

**Note:** When replacing hose, be sure all hose fittings are secure.

### B. O-Ring replacement:

1. Remove screws (36), washers (37) and nuts (43) from base or swivel plate (38 or 32).
2. Remove retaining ring (19) and canopy guide (9).
3. Remove stand cover (20).
4. Remove swivel (18).
5. Remove four nuts (24).
6. Remove swivel (18).

**Note:** Take care not to damage or scratch the main shaft (25) or swivel (18) during swivel removal.

7. Remove old O-rings (17) and discard.
8. Clean all contamination from main shaft (25) and swivel (18).
9. Install new O-rings and apply a light coat of commercial grease to main shaft (25) and swivel (18).
10. Remove all excess grease.
11. Reassemble by reversing above procedure.

### C. Ratchet and spring assembly replacement:

If reel will not develop tension or retract hose, ratchet and spring assembly (7) will need to be replaced.

To replace ratchet and spring assembly (7):

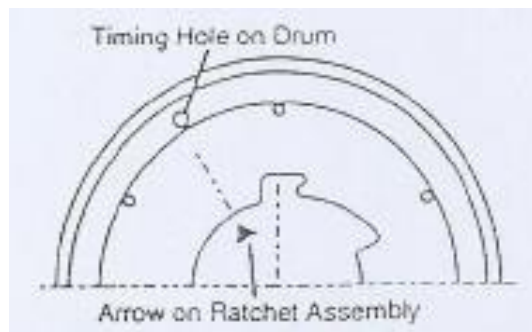
1. Remove screws (36), washers (37) and nuts (43) from base or swivel plate (38 or 32).
2. Remove retaining ring (4) and canopy guide (9).
3. Remove cover assembly (5).
4. Remove six nuts (6) and ratchet spring assembly (7) from drum assembly (8) and replace.

5. To reassemble, reverse above procedure.

**Note:** Spring is completely self-contained and safe to handle.



**Caution:** When reassembling ratchet and spring assembly (7), be sure arrow on ratchet plate aligns with alignment hole in drum (8).



## ADJUSTMENTS

### A. Ratchet lock:

The ratchet lock works with reel mounted in any position and needs no adjustment. To disable ratchet, remove the ratchet spring (41), ratchet pawl (44) and shaft lever (40).

### B. Hose guide:

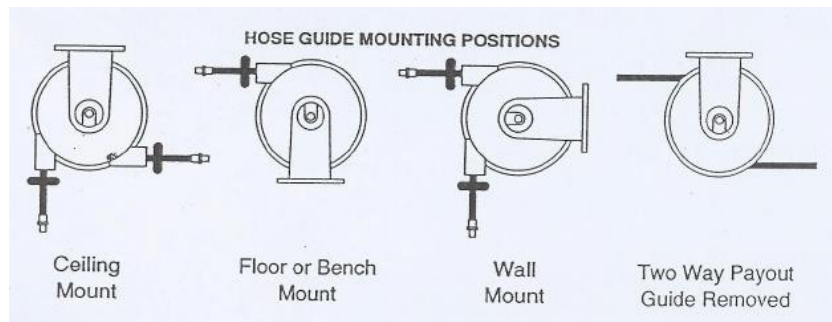
The canopy guide (9) may be set at any position around the drum assembly (8).

**Note: The guide must be set so the hose pays off the reel in a straight line without bends.**

To adjust canopy guide:

1. Remove locknut (13) and clamp assembly (14).
2. Rotate canopy guide (90) to desired pay-out location.

The guide can be removed for two-way hose pay-out.



### C. Spring tension:

Tension may be adjusted before or after final installation of reel and connection of hose has been made.

To adjust tension:

1. Pull hose out to determine if more or less tension is desired.
2. Place wrench flat ends of main shaft (25).
3. While holding wrench firmly, pull spring pin on cover (5) until it allows main shaft to rotate.
4. Turn main shaft (25) counter-clockwise to decrease tension and clockwise to increase.
5. Re-engage spring pin when desired tension has been set. The pin will set every  $\frac{1}{2}$  turn.



**Caution:** Pull hose out completely to ensure enough spring revolutions remain for operating. Also, always leave at least 1-2 turns between full extension and when the spring is wound tight (bottomed out). If entire hose assembly cannot be pulled out, decrease spring tension until full extension is possible. Failure to test in this manner can cause spring damage.

## CONTACT DETAILS

For installations outside the UK please contact your supplier.

For information on IMC service support (if applicable), please call IMC on +44 (0) 1978 661155. Alternatively, contact us via email or fax:

|                  |  |
|------------------|--|
| IMC Spares Desk  | Fax: +44 (0) 1978 667759<br>E-mail: <a href="mailto:spares@imco.co.uk">spares@imco.co.uk</a>   |
| IMC Service Desk | Fax: +44 (0) 1978 667766<br>E-mail: <a href="mailto:service@imco.co.uk">service@imco.co.uk</a> |

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