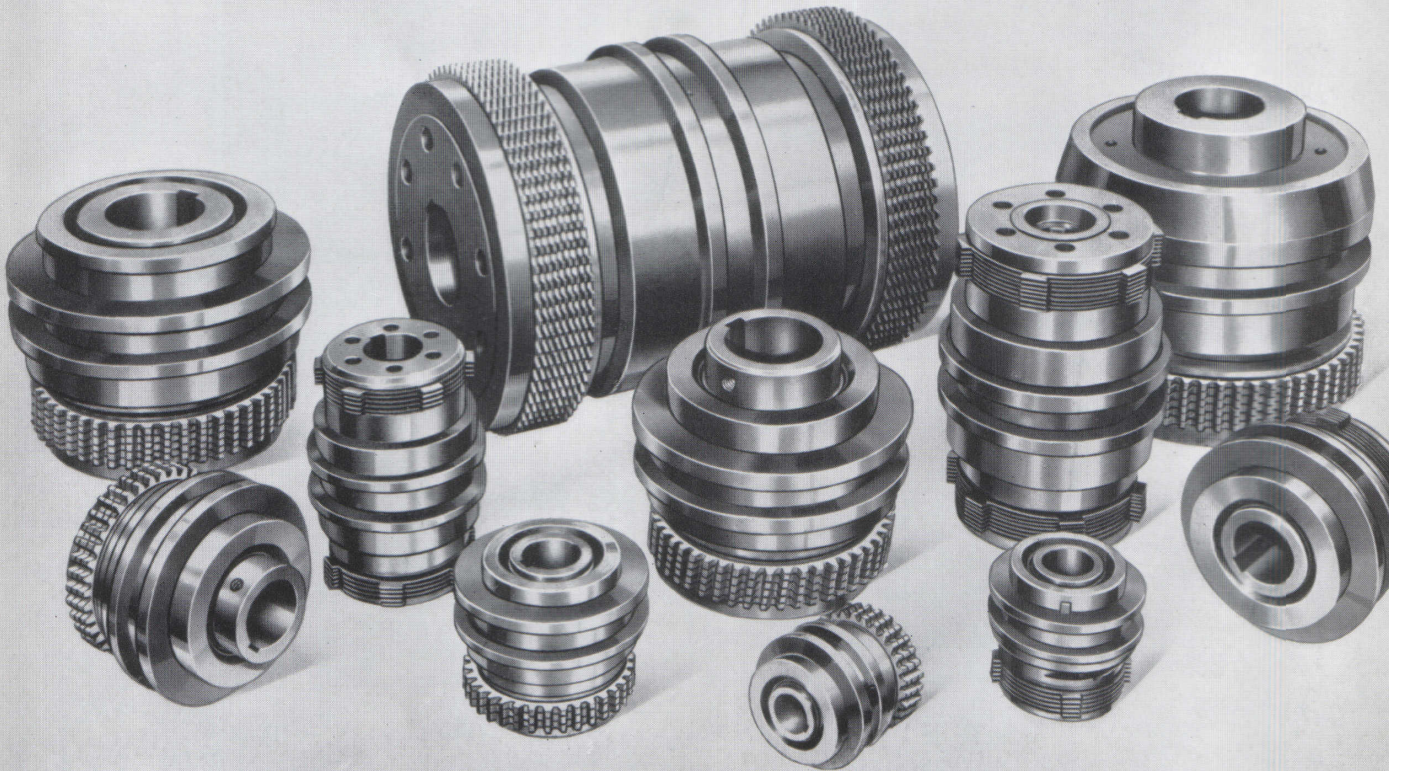


**SPARE PARTS LIST**  
with  
**Adjustment and Maintenance**  
**Instructions for**  
**The TAYLOR Patent MULTI DISC CLUTCHES**  
(PATENT No. 729060)

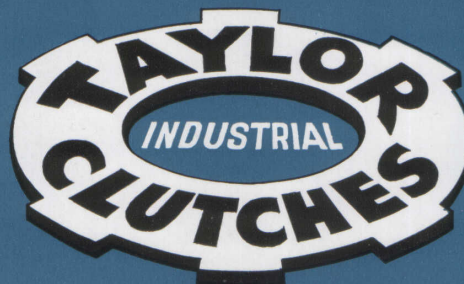


**TAYLOR INDUSTRIAL CLUTCHES LTD.**

**TROWS UPPER WORKS**

**CASTLETON-Rochdale-Lancs**

PHONE: ROCHDALE 32858



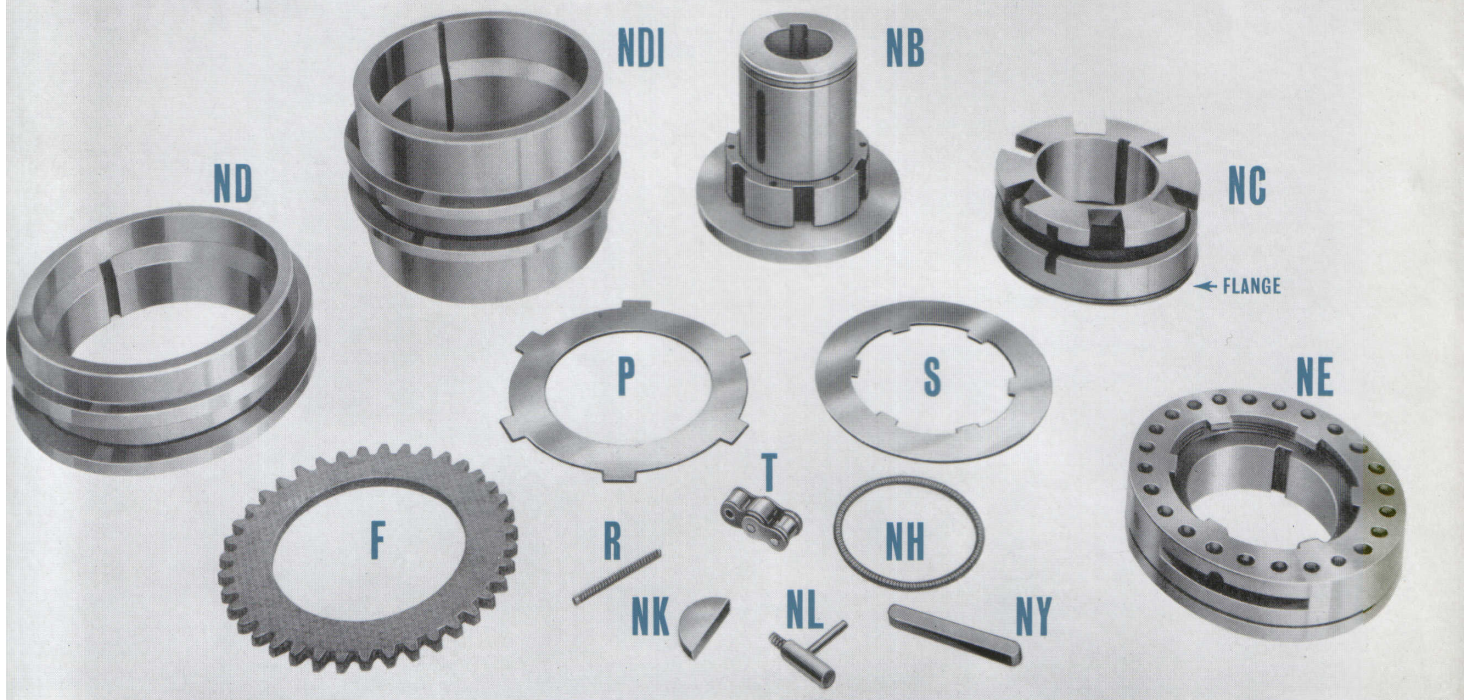
GRAMS: DRIVES Castleton · Rochdale

Leaflet S2

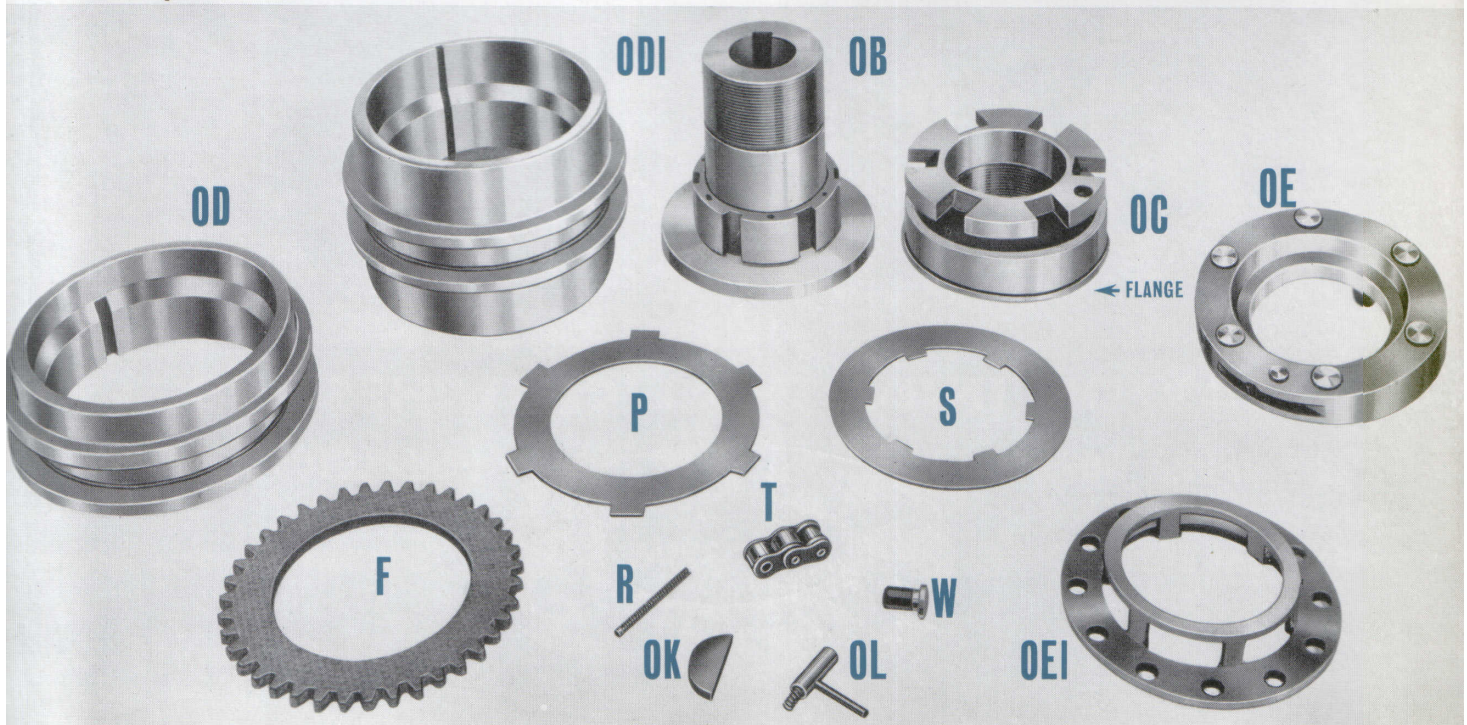
# The TAYLOR Patent MULTI

FOR THE CONVENIENCE OF USERS WHEN REQUIRING SPARE PARTS FOR CLUTCHES WE GIVE BELOW ILLUSTRATIONS OF THE VARIOUS UNITS FROM WHICH IDENTIFICATION CAN READILY BE MADE. IT WILL BE APPRECIATED THAT IT IS USUALLY NECESSARY TO DISMANTLE THE CLUTCH BEFORE PARTS CAN BE IDENTIFIED.

## NEW TYPE - with closed Coil Spring Circlip



## OLD TYPE - with Screwed inner sleeve



# DISC CLUTCHES PATENT No. 729060

IN ORDERING SPARES IT IS SUFFICIENT TO GIVE THE TYPE LETTER AND THE D1/2 OR 3 DIMENSION TO IDENTIFY THE TYPE AND SIZE OF CLUTCH, WITH EXCEPTION THAT IN THE CASE OF INNER SLEEVES NB AND OB WE ALSO REQUIRE THE DIMENSION FROM THE RANGE B1 TO B7, THE BORE AND WIDTH OF KEYWAY.

## SPARES FOR NEW TYPE CLUTCHES

- NC** Link retaining ring. Does this have a flange or not?
- ND** Single sliding sleeve. State type (see next page) and outside diameter D1 or D3.
- NDI** Double ended sliding sleeve. Is slot H central or offset? See type B.
- NB** Inner sleeve. State length through, bore and width of keyway.
- NE** Clamping plate with attached locking plate.
- NK** Woodruff key for part NC.
- NL** Adjustment lock pin and spring.
- NH** Closed Coil Spring Circlip.
- NY** Parallel key for inner sleeve "NB."

IN ALL CASES STATE  
REFERENCE LETTER  
AND TYPE FROM  
FOLLOWING PAGE.



The following parts vary in number depending on the size of the clutch. A double clutch always has twice the number of parts of a single clutch, with the exception of the sliding operating sleeve and the Woodruff key.

## FOR BOTH NEW AND OLD TYPE

- P** Phosphor bronze outer discs—oil type only.
- S** Steel inner discs—oil type.
- F** Fabric discs—dry type only.
- S** Steel inner discs—dry type.
- R** Plate release springs and plungers.
- W** Rubber buffer, stud and fibre washer.
- T** Chain toggle links. (Old type only)

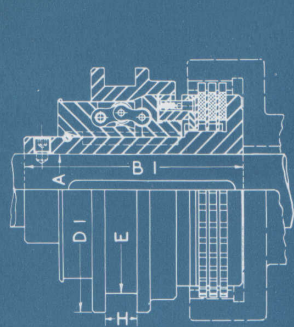
## CLUTCH SIZES

1	2	3	4	5	6	7	8	9
6	6	6	6	8	10	12	9	9
6	6	6	6	8	10	12	9	9
3	3	3	3	4	5	6	6	6
3	3	3	3	4	5	6	6	6
2	3	4	6	3	3	4	6	6
5	5	6	6	6	6	8	8	12
6	6	6	6	6	6	6	6	6

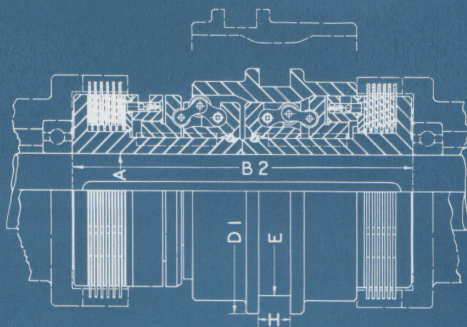
QUANTITIES FOR SINGLE CLUTCH

## SPARES FOR OLD TYPE CLUTCHES

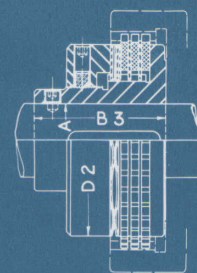
- OC** Adjusting nut. Does this have flange or not?
- OD** Single sliding sleeve. State type (see next page) and outside diameter D1 or D3.
- ODI** Double ended sliding sleeve. Is slot H central or offset? See type B.
- OB** Inner Sleeve. State length through, bore and width of keyway.
- OE** Clamping plate. State whether Single or Double Clutch and what type (see next page).
- OEI** Steel locking plate with brass cage.
- OK** Woodruff key for part OC.
- OL** Adjustment lock pin and spring.



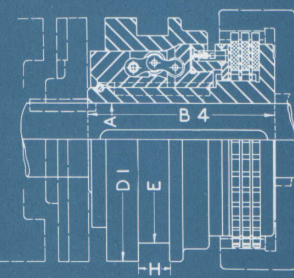
**A** STANDARD SINGLE CLUTCH



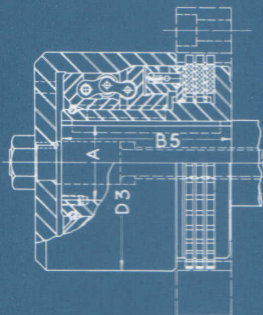
**B** DOUBLE CLUTCH



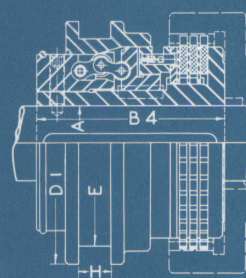
**C** OVERLOAD SAFETY TYPE



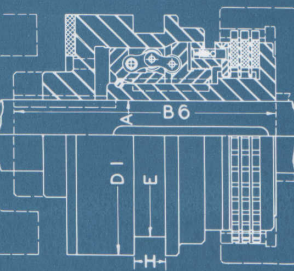
**D** SINGLE CLUTCH WITH SLIDING BRAKE PLATE



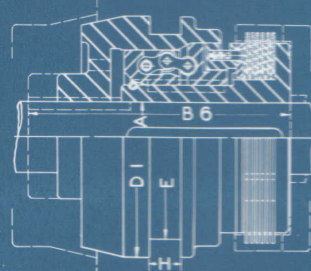
**E** SINGLE TYPE FOR HOLLOW SHAFT CONTROL



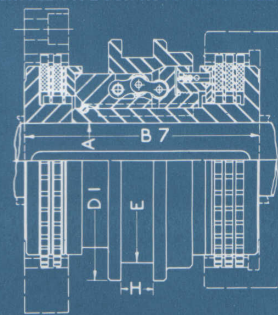
**F** SINGLE TYPE FOR AUTOMATIC RELEASE



**G** SINGLE TYPE WITH FLAT FERODO FACED BRAKE



**H** SINGLE TYPE WITH CONED BRAKE

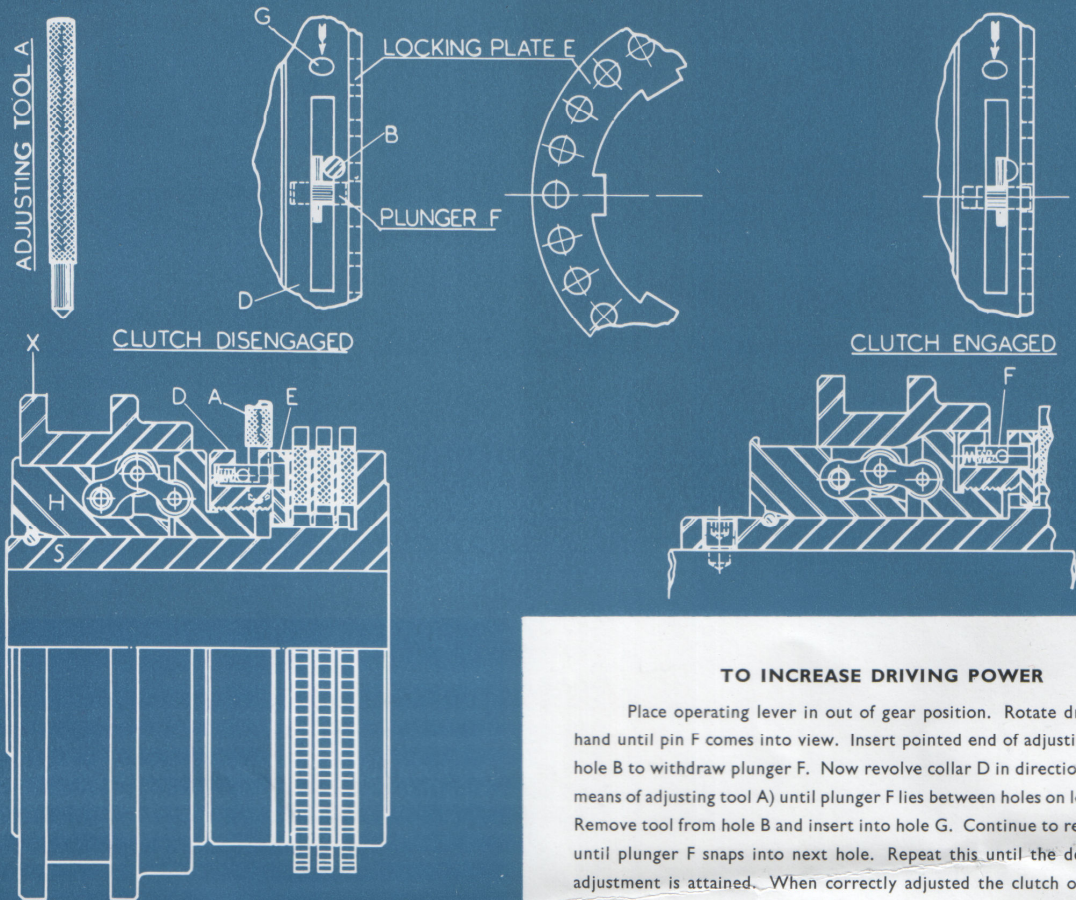


**J** SINGLE TYPE WITH BRAKE FLANGE

SIZE NO.	DISC FRIC. DIAM.	MAX. BORE A	TRAVEL TO ENGAGE		LEADING DIMENSIONS in inches											
			SINGLE	DOUBLE	B1	B2	B3	B4	B5	B6	B7	D1	D2	D3	E	H
1	2 $\frac{3}{4}$	1	$\frac{9}{16}$	$\frac{9}{16}$	4 $\frac{1}{16}$	6 $\frac{1}{4}$	2 $\frac{11}{16}$	3 $\frac{9}{16}$	3 $\frac{1}{8}$	4 $\frac{3}{4}$	4 $\frac{23}{32}$	3 $\frac{3}{8}$	2 $\frac{11}{16}$	3 $\frac{3}{16}$	2 $\frac{7}{8}$	$\frac{1}{2}$
2	3 $\frac{1}{4}$	1 $\frac{1}{4}$	$\frac{9}{16}$	$\frac{9}{16}$	4 $\frac{1}{16}$	6 $\frac{1}{4}$	2 $\frac{3}{4}$	3 $\frac{9}{16}$	3 $\frac{1}{8}$	4 $\frac{3}{4}$	4 $\frac{3}{4}$	4	3 $\frac{3}{16}$	3 $\frac{3}{4}$	3 $\frac{3}{8}$	$\frac{5}{8}$
3	3 $\frac{15}{16}$	1 $\frac{1}{2}$	$\frac{11}{16}$	$\frac{3}{4}$	5 $\frac{3}{16}$	8	3 $\frac{1}{8}$	4 $\frac{7}{16}$	4	6 $\frac{3}{16}$	5 $\frac{3}{4}$	5	3 $\frac{7}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{4}$	$\frac{3}{4}$
4	4 $\frac{9}{16}$	1 $\frac{3}{4}$	$\frac{11}{16}$	$\frac{3}{4}$	5 $\frac{3}{16}$	8	3 $\frac{1}{8}$	4 $\frac{7}{16}$	4	6 $\frac{5}{16}$	5 $\frac{9}{16}$	5 $\frac{3}{4}$	4 $\frac{1}{2}$	5 $\frac{1}{8}$	4 $\frac{7}{8}$	$\frac{3}{4}$
5	5 $\frac{5}{16}$	2 $\frac{1}{8}$	$\frac{13}{16}$	$\frac{7}{8}$	6 $\frac{3}{16}$	9 $\frac{1}{2}$	3 $\frac{3}{4}$	5 $\frac{7}{16}$	4 $\frac{3}{4}$	7 $\frac{1}{2}$	5 $\frac{27}{32}$	6 $\frac{5}{8}$	5 $\frac{1}{4}$	6	5 $\frac{5}{8}$	$\frac{7}{8}$
6	6 $\frac{5}{16}$	2 $\frac{3}{4}$	$\frac{13}{16}$	$\frac{15}{16}$	7	10 $\frac{3}{4}$	4 $\frac{3}{8}$	6 $\frac{1}{8}$	5 $\frac{3}{8}$	8 $\frac{1}{2}$	7 $\frac{7}{16}$	7 $\frac{7}{8}$	6 $\frac{1}{4}$	7 $\frac{1}{4}$	6 $\frac{3}{4}$	$\frac{7}{8}$
7	7 $\frac{9}{16}$	3 $\frac{1}{2}$	$\frac{15}{16}$	1	8 $\frac{3}{8}$	12 $\frac{3}{8}$	4 $\frac{7}{8}$	7 $\frac{3}{8}$	6 $\frac{3}{16}$	9 $\frac{1}{16}$	9 $\frac{1}{2}$	9 $\frac{1}{4}$	7 $\frac{1}{2}$	8 $\frac{3}{8}$	8	1
8	9 $\frac{1}{8}$	3 $\frac{1}{2}$	1	1	9 $\frac{1}{4}$	13 $\frac{3}{4}$	5 $\frac{3}{4}$	8	6 $\frac{7}{8}$	10 $\frac{3}{4}$	9 $\frac{15}{16}$	9 $\frac{7}{8}$	9 $\frac{1}{8}$	9 $\frac{1}{8}$	8 $\frac{5}{8}$	1
9	11 $\frac{1}{8}$	4	1 $\frac{1}{4}$	1 $\frac{1}{4}$	10 $\frac{5}{16}$	15 $\frac{1}{2}$	6 $\frac{1}{8}$	8 $\frac{15}{16}$	7 $\frac{3}{4}$	12 $\frac{3}{8}$	11 $\frac{7}{8}$	11 $\frac{5}{8}$	11	10 $\frac{3}{4}$	10 $\frac{1}{4}$	1 $\frac{1}{4}$

**NOTE:** In the case of Nos. 1 and 2 size clutches the B5 dimension can be 3 $\frac{7}{16}$ " and the B2 dimension 6 $\frac{7}{8}$ " for old type clutches.

# Method of adjusting the Taylor Multi Disc Clutch



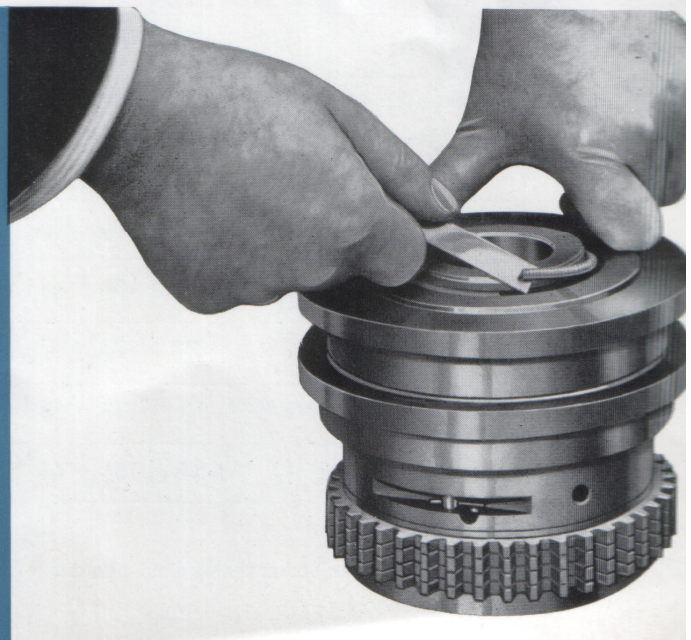
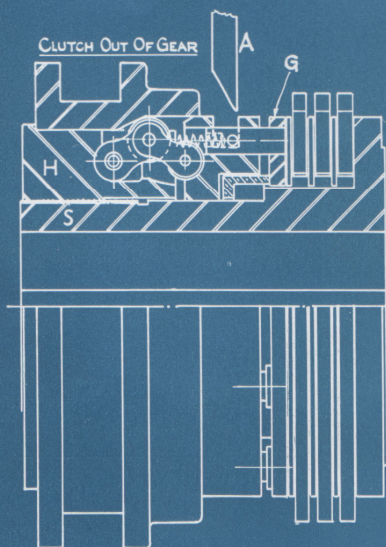
## TO INCREASE DRIVING POWER

Place operating lever in out of gear position. Rotate driving shaft by hand until pin F comes into view. Insert pointed end of adjusting tool A into hole B to withdraw plunger F. Now revolve collar D in direction of arrow (by means of adjusting tool A) until plunger F lies between holes on locking plate E. Remove tool from hole B and insert into hole G. Continue to revolve collar D until plunger F snaps into next hole. Repeat this until the desired state of adjustment is attained. When correctly adjusted the clutch operating lever requires a distinct pressure to engage.

## TO DISMANTLE CLUTCHES

**OLD TYPE.** Put clutch in out of gear position. Insert tool A into hole B (see diagram above) and continue to unscrew in anti-clockwise direction until part H is completely unscrewed off part S (diagram below).

**NEW TYPE.** Put clutch in out of gear position. Insert tool A into hole B and turn collar D as far as possible in anti-clockwise direction. Then push down part H by firm hand pressure to expose spring coil circlip, and remove this by thin steel rule or pointed tool as photo below.



## INSTALLATION AND FITTING OF TAYLOR CLUTCHES

### Fitting

The clutch body should be a good fit on the shaft, using a sunk parallel key or Woodruff type. Various methods of locating clutches endwise on the shaft are shown on the diagrams A to J on the inside page. When an Allen screw is used on an extension to the clutch body the screw should be well sunk into the shaft.

### Clutch couplings connecting two shafts together

Special care must be taken to ensure that the two shafts are in perfect alignment with each other, and efficiently located by collared bearings close up to each end of the clutch. The clutch outer shell should be fitted with a phosphor bronze centralizing bush or ball bearing as required. For normal drives and infrequent operation, phosphor bronze may be used, but for high speeds and frequent operation it is better to use ball or roller bearings.

When a wet plate clutch is fitted in a slow speed gear box the oil level should be of such a height that the clutch plates just dip into it.

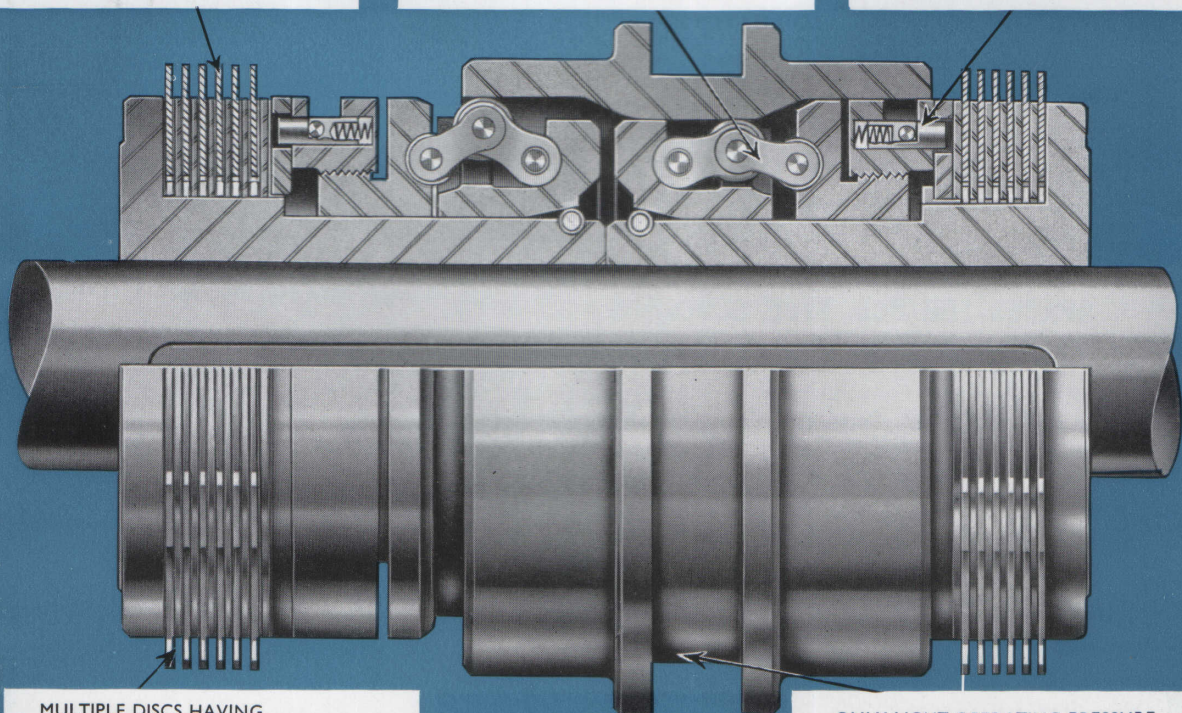
### Operating Gear and Operating Collar

In order to obtain the best service the operating lever should be fitted quite square so that the operating dies or yoke exert equal pressure on both sides of the slot in the sliding sleeve. This is very important in order to promote free movement, to eliminate danger of binding and to reduce the possibility of wear of either the sliding sleeve or the operating dies or yoke.

OIL TYPE CLUTCH. INNER STEEL AND  
OUTER PHOSPHOR BRONZE DISCS  
DRY TYPE CLUTCH. INNER STEEL AND  
OUTER FEROBESTOS

MULTIPLE LINK TOGGLES FITTED  
WITH ANTI FRICTION ROLLERS  
DEVELOP EXTREMELY GREAT  
PRESSURE UNIFORMLY THROUGHOUT  
THE FULL FACE OF FRICTION DISCS

SIMPLE, EASILY ACCESSIBLE  
ADJUSTMENT, ACCOMPLISHED WITH  
SLIGHT TURN OF THE SCREWED  
COLLAR



MULTIPLE DISCS HAVING  
EXCEPTIONALLY LARGE FRICTIONAL  
AREAS IN ORDER TO ENSURE GREAT  
FLEXIBILITY, LONG LIFE AND AMPLE  
WEARING SURFACES

ONLY LIGHT OPERATING PRESSURE  
NEEDED TO SLIDING SLEEVE  
ENSURING SENSITIVENESS OF  
CONTROL