

### COMET TORQUE CONVERTER MODEL 40 SERIES SPECIFICATIONS & GENERAL INFORMATION

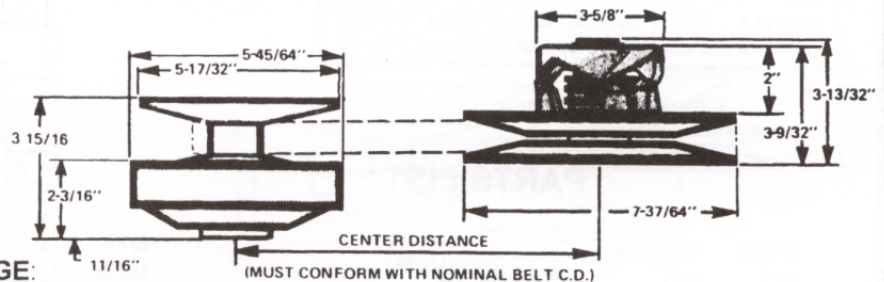


FOR ALIGNMENT SEE PAGE 3 & 4

NOTE: DIMENSIONS AND RATIOS ARE IN ACCORDANCE WITH ENGINEERING'S DRAWING CURRENT WITH THE DATE SHOWN ON THIS ITEM. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

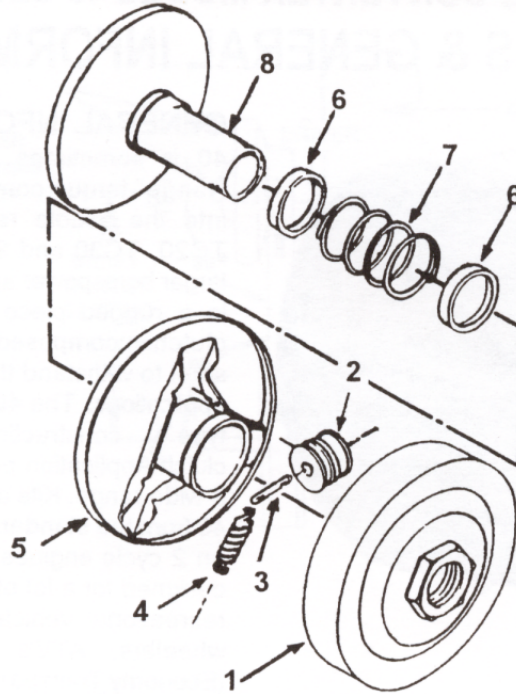
**GENERAL INFORMATION:** The Model 40 is sometimes referred to as the "Mid-Range" torque converter system since it falls into the middle range between the series TC20, TC30 and 90 or 102 systems for the larger horsepower applications. The Model 40 is a rugged piece of machinery. The drive clutch is composed of heavy walled stamped steel to withstand the extreme rigors of rough applications. The 40 driven unit is of the same type construction as the drive clutch. Application possibilities for the 40 cover a wide range. Kits are available to convert the 40 from the standard 4 cycle setup to be used on 2 cycle engines. The Model 40 system is designed for a lot of applications including the recreational vehicles such as the big three wheelers, ATV's LTV's and the E.T.V. (Economy Transportation Vehicles). Materials handling and other commercial uses like: oil well pumps, tractors, tillers, mowers, construction equipment, plus industrial equipment. In short, wherever there is a need, want and use for a torque sensitive drive system device that is infinitely variable from engagement to the highest speeds attainable (within the pitch diameter range) . . . the 40 system should be considered.

**SYSTEM:** MODEL 40 SERIES  
**TYPE:** SYMMETRICAL (26 )  
**RECOMMENDED H.P.**  
**MIN. 8 H.P. MAX: 18 H.P. 4 CYCLE**  
**DRIVE BELT:** 7/8" TOP WIDTH  
**SYMMETRICAL TYPE**  
**DRIVE CLUTCH BORE SIZES:**  
 7/8" , 1" (3 / 16-1/4 KEY)  
**DRIVE CLUTCH ENGAGEMENT RANGE:**  
**MIN. 1600 RPM MAX. 3100 RPM**  
**DRIVEN UNIT:**  
 7 1/2" DIA. SEE 40D  
 8 1/2" DIA. SEE 44D



40C w/40D		40C w/44D	
SPEED REDUCTION RATIOS			
HIGH	LOW	HIGH	LOW
1:1	2.43:1	1.24:1	2.83:1
OVERALL 2.43		OVERALL 2.29	

### ASSEMBLY SEQUENCE



## 40C DRIVE CLUTCH

7/8 -1" BORE

DRIVE CLUTCH ASSEMBLY COMPLETE

ORDER NO.	DESCRIPTION
203015A	Drive Clutch, 1" Bore, 1/4 key
203016A	Drive Clutch, 7/8 Bore, 1/4 key

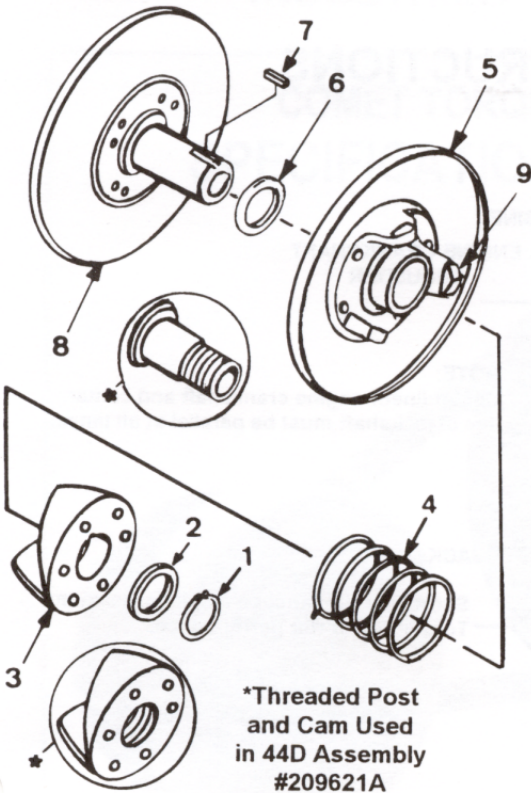
DRIVE CLUTCH ENGAGEMENT CHART			
		SPRINGS	
		YELLOW 14# 203043	RED 28# 203040
CAM ROLLERS	HEAVY 203648	*1600 RPM	2000 RPM
	MEDIUM 203649	2200 RPM	2600 RPM
	LIGHT 203650	2400 RPM	3100 RPM
*STANDARD CLUTCH SET UP			

### PARTS LIST

ITEM NO.	ORDER NO.	DESCRIPTION	QTY REQ.
1	203021A	Cover & Drive Plate	1
2	203648A	Cam, Roller, Std.	3
3	203044A	Clip, Spring	3
4	203043A	Spring, Extension, Yel. Std.	3
5	203022A	Face, Movable & Hub	1
6	203031A	Bushing, Guide	2
7	203039A	Spring, Compression	1
8	203023A	Face, Fixed & Post, 1" Bore, 1/4 Key	1
8	203024A	Face, Fixed & Post. 7/8 Bore, 1/4	1

# 40/44D ASSEMBLY SEQUENCE

40 DRIVEN UNITS, 7/8 BELT --- 7 1/2" Dia.	
ORDER NO.	DESCRIPTION
209151A	Driven Unit, 5/8 Bore, 3/16 Keyway
209133A	Driven Unit, 3/4 Bore, 3/16 Keyway
209139A	Driven Unit, 7/8 Bore, 3/16 Key



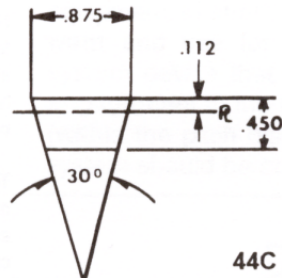
ITEM NO.	ORDER NO.	DESCRIPTION	PART USED ON DRIVEN UNIT(S) LISTED BELOW
1	203159A	Ring, Retaining	ALL 40D
2	205208A	Washer, Thrust	ALL 40D
3	209115A	Cam, Fixed	ALL 40D
4	203130A	Spring, Red	ALL 40D
5	209128A	Movable Face and Cam with Bearing	ALL 40D
6	203097A	Spacer	ALL 40D
7	209166A	Key, 3/16 Sq. x 1/2	209151A-209133A
8	209150A	Fixed Face & Post 5/8 Bore x 3/16 Keyway	209151A
8	209132A	Fixed Face & Post 3/4 Bore x 3/16 Keyway	209133A
8	209138A	Fixed Face & Post 7/8 Bore x 3/16 key	209139A
9	206458A	Button (3)	ALL 40D

44 DRIVEN UNITS 7/8 BELT -- 8 1/2" Dia.	
ORDER NO.	DESCRIPTION
209621A	Driven Unit, 3/4 Bore, Threaded Post & Cam

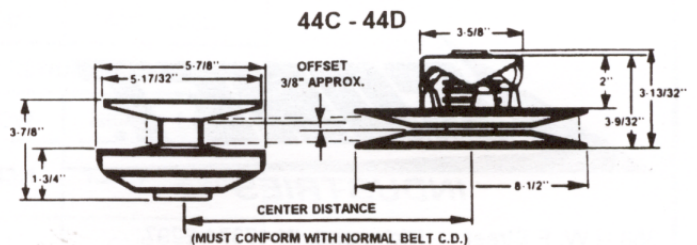
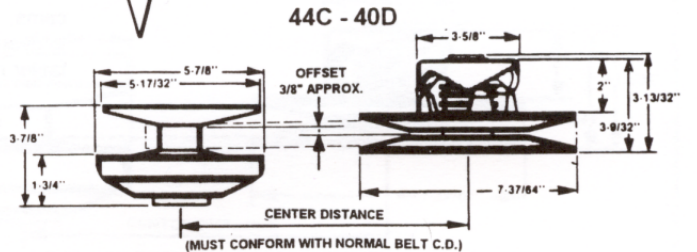
ITEM NO.	ORDER NO.	DESCRIPTION	PARTS USES ON DRIVEN UNIT(S) LISTED BELOW
3	206521A	Cam, Fixed, Threaded Cam	209621A
4	203130A	Spring, Red	209621A
5	209620A	Movable Face and Cam with Bearing	209621A
8	209619A	Fixed Face & Post, 3/4 Bore, Threaded Post	209621A
9	206458A	Button (3)	209621A

## RECOMMENDED BELT SPECIFICATIONS 40/44 SERIES — SYMMETRIC

COMET Order No.	COMET No. Marked On Belt	40 C.D. Setting	44 C.D. Setting	Belt O.C.
203783A	40-75	7-1/4"		31.950
203784A	40-80	7-7/8"		32.900
203785A	40-85	8-3/16"		33.870
203786A	40-90	8-5/8"	7-5/8"	34.830
203787A	40-95	9-3/8"	8-3/16"	35.800
203788A	40-100	9-3/4"	8-11/16"	36.780
203792A	40-105	10-1/4"	9-3/16"	37.750
203789A	40-110	10-1/2"	9-5/8"	38.650
203790A	40-120	11-1/2"	10-9/16"	40.500
203791A	40-130	12-5/8"	11-11/16"	42.660
204331A	40-140	13-3/4"	12-5/8"	44.530
213165A	44-85	15-3/16"	14-7/32"	47.500
213295A	44-75	14-11/32"	13-13/32"	45.380



BELT CROSS SECTION  
REFERENCE ONLY

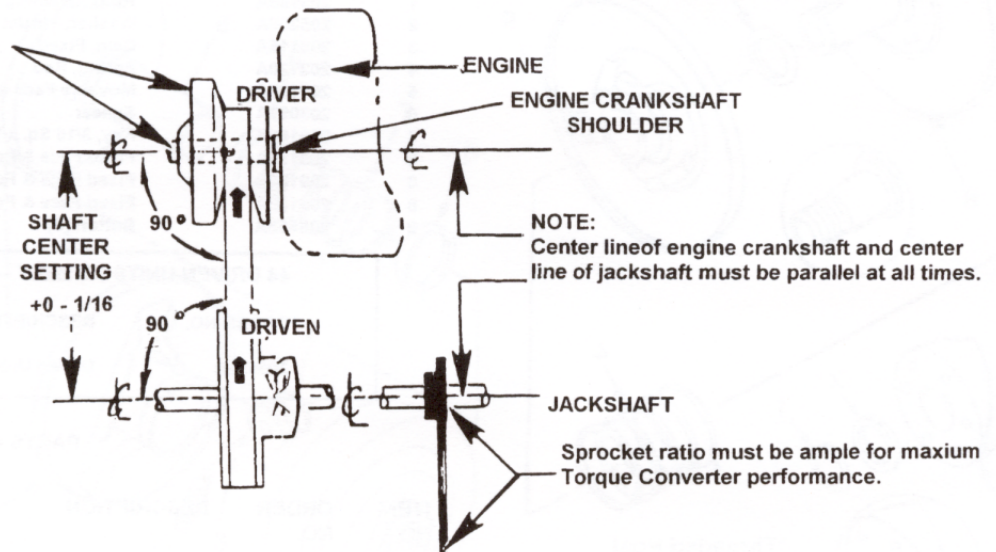


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# SYSTEM INSTALLATION INSTRUCTIONS

## IMPORTANT!

Torque Converter DRIVE UNIT  
MUST NOT FLOAT on engine  
crankshaft. It must be bolted  
tight against engine crankshaft  
shoulder. Recommended Torque  
for bolt: 24 ft. Lbs. To 30 ft. Lbs.  
Max



## ADJUSTING THE SPRING TENSION OF THE DRIVEN UNIT

NOTE: By increasing the spring tension of the torque sensing system...the power ratio of the system (Driver and Driven) can be held longer at higher engine r.p.m.'s before it is overcome by the clutch driver.

To shorten the time required for the driven member to attain its speed ratio, DECREASE the amount of spring tension of the torque sensing cams. This will allow the r.p.m. of the drive clutch to overcome the power ratio of the driven unit at a faster rate in a lower r.p.m. range.

**COMET**  
INDUSTRIES

358 N.W. F Street Richmond, IN 47374-2297  
(765) 966-8161 Fax: (765) 935-2346  
(800) 999-8161 <http://www.hoffcocomet.com>

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